

**REPORTING DROUGHT: FRAMING AN ANTHROPOGENIC NATURAL DISASTER IN
THE SOUTH AFRICAN MAINSTREAM PUBLICATION, *CITY PRESS*, OVER THREE
YEARS (2015-2018)**

A half-thesis submitted in fulfilment of the requirements for the degree of
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Abstract

This study interrogates how the ongoing anthropogenic drought, declared a disaster in five South African provinces in 2015, has been represented by mainstream news media. The news media enables public participation which is vital to climate action and the regulation of harmful neoliberal practices that fuel climate change and are thus necessary to provide information about climate change and to support political interventions. Despite the gravity of the drought crisis, there is a severe lack of public opinion about it and the complex weather patterns to which it is attributed. This study thus investigates how the drought has been framed by mainstream news media in South Africa, confining itself to a single title, the *City Press*.

To analyse representations of drought in the *City Press*, this study adopts a Foucauldian approach to discourse which considers representations as meaning constructed through language. The knowledge perpetuated in news texts is thus frequently perceived as the ‘truth’ about the drought. This knowledge is imbued with power as those in positions of authority determine what is articulated as truth. Through various institutional practices, journalists limit what is said about the drought, framing it in particular ways and privileging particular voices. What the public learns about the drought (and in turn, climate change) is thus limited by the norms and routines of the journalistic regime and the corporate nature of ownership. Notably, the *City Press* operates within the neoliberal economic order to which climate change is attributed.

This study is located within the Cultural Studies and Journalism Studies paradigms and is further informed by a qualitative methodology and two methods of textual analysis, that is, thematic analysis and Critical Discourse Analysis. The sampling process produced a database of 26 news texts published by the *City Press* between the years 2015 to 2018. Five texts were purposively selected for an in-depth analysis based on a broad thematic analysis as reasonably representative of the discourses that recur.

Although the *City Press* positions itself as a critical purveyor of political information, only three themes recur in the texts. These themes position drought in relation to the agricultural economy and urban infrastructure; foreground the voices of corporate entities; while the climate science behind weather patterns is inadequately interpreted. Any discussion of climate change and alternatives to mainstream economic practices is almost entirely omitted.

Declaration

I, Thandiwe Matyobeni, hereby declare that this research thesis is my own original work, that all reference sources have been accurately reported and acknowledged, and that this document has not previously, in its entirety or in part, been submitted to any University in order to obtain an academic qualification.

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ABBREVIATIONS

- ASGISA** Accelerated and Shared Growth Initiative for South Africa
- ASSAf** Academy of Science of South Africa
- BASIC** Brazil, South Africa, India and China
- CDA** Critical Discourse Analysis
- CEC** Commission for Environmental Cooperation
- CFCs** Chlorofluorocarbons
- CO2** Carbon dioxide
- COP** Conference of Parties
- COP-15** Conference of Parties held in Copenhagen (2009)
- COP-16** Conference of Parties held in Cancun (2010)
- EJNF** Environmental Justice Networking Forum
- GCC** Global Climate Coalition
- GEAR** Growth Employment and Redistribution strategy
- GEPF** Government Employees Pension Fund
- GHG** Greenhouse gases
- IEA** International Energy Agency
- IPCC** Intergovernmental Panel on Climate Change
- ITUC** International Trade Union Confederation
- NAP** National Academy Press
- NDCs** Nationally Determined Contributions
- PIC** Public Investment Corporation
- PPP** Polluter Pays Principle
- SEO** Search Engine Optimisation
- TNC** Transnational Corporation
- UN** United Nations
- UNEP** United Nations Environmental Program
- UNFCCC** United Nations Framework Convention on Climate Change
- WBCSD** World Business Council on Sustainable Development

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CHAPTER 1: CONTEXTUALISING THE STUDY

Rationale

South Africa is currently, at the time of writing, experiencing the worst water shortages in over a century, which is a result of the drought crisis that has persisted for three years. Climate scientists have attributed the severity of the drought and other extreme weather conditions to climate change. For this reason, this study is driven by a concern about the phenomenon of climate change and its incremental effects. I thus chose to look at and reflect on the news coverage of a particular extreme weather condition that South Africa is experiencing. I found that a cursory overview of the *City Press*'s coverage of the drought suggested a tendency to omit mention of climate change as a cause of the aggravated drought.

Largely based on its historical involvement in the revolutionary press, the *City Press* is widely considered to be a primary source of information for the black middle-class in South Africa and positions itself as an advocate for social justice and critical political action. It is this positioning that distinguishes it from its corporate owners, Media24. For this reason, I anticipated that its coverage of the drought would facilitate political climate action. The rationale behind this study is therefore to understand what discourses are prioritised by the *City Press*'s coverage of the crisis. I believe this is essential for future documentation and coverage of environmental events as critical coverage of climate events is necessary for public participation and in turn political action.

This study sets out to investigate the discourses that are privileged in the *City Press*'s coverage of the ongoing crisis. The aims are both to identify and analyse the discourses articulated in the selected texts. For this study, I confine my interrogation of drought coverage to a single mainstream title, the *City Press*. As I am concerned with how the drought has been framed by the publication, I recognise that the media play a significant role in constructing public opinion about climate change and that journalistic representation of ecological disasters impacts on public opinion and political action. The broad research question is: How is the ongoing drought (declared a disaster in 2015) represented in the mainstream South African news publication, *City Press*? This study is qualitative and adopts a social constructionist approach (Hall 1997). The methods include a broad thematic analysis and textual analysis of *City Press* news texts.

Introduction

I begin this introductory chapter by establishing that consensus amongst the scientific community insists that climate change is occurring and is caused by human industrial and corporate practices. I thus address the various strategies of the neoliberal economic order that perpetuate these practices and their legitimating discourses. To focus this study on South Africa in particular, I move to discuss the South African economy's position in the neoliberal world order. Because attitudes regarding environmental issues are affected by this neoliberal paradigm, I then discuss the robust environmental justice movement in South Africa and subsequently, the more recent 'just transition' aspect. I propose that this 'just transition' from a harmful extractive economy to a regenerative economy is vital to progressive climate action, as is critical news coverage of environmental events. As the focus of this study is on how drought been represented, I move to discuss South Africa's susceptibility to extreme weather conditions, particularly drought, and how weather conditions that are exacerbated by climate change impact on the region. Finally, as I confine my interrogation of the coverage of drought in mainstream news to a single publication, the *City Press*, I contextualise the publication in the South African press landscape.

1.1. Scientific consensus on the Anthropocene

Scientific evidence from the majority of active climate scientists indicates that climate change caused by human activity is occurring and its impact is worsening rapidly, resulting in the current geological era being referred to as the 'Anthropocene', the age of human-aggravated climate change (Intergovernmental Panel on Climate Change (IPCC) 2007; Klein 2014; Steffen, Crutzen & McNeil 2007). This is substantiated by a peer-reviewed study conducted by Cook et al. (2013), which confirms 97 percent of climate scientists agree that anthropogenic climate change is occurring. The study is further supported by peer reviewed articles, national science schools and international organisations like the International Energy Agency (IEA)¹ (Klein 2014). Despite this overwhelming consensus, 57 percent of the United States public disagree or are unaware that human activity is causing the earth's rapid warming (Pew Research Center 2012). This ambiguity - largely part of a culture of denial - has limited the effectiveness of climate action. Although the natural process of global warming is recognised as having a minimal contribution to the

¹The IEA prioritises energy security, economic development, environmental awareness and engagement worldwide (IEA 2018).

rapidly increasing temperature, denialist discourses (discussed below) are largely based on an overly simplistic understanding of climate change as a naturally occurring phenomenon (National Academy Press (NAP) 1994).

The term ‘climate change’ refers to an overall change in the Earth’s average temperature, typically in response to various factors which cause fluctuations in the sun’s energy (NAP 1994; Marcia 2012). The increase in the Earth’s temperature is facilitated by global warming which is attributed to the greenhouse effect - the process that regulates changes in the climate in order to maintain a balanced temperature (homeostasis) on Earth (Noone 2012). This process allows sufficient sunlight to be absorbed into the Earth’s atmosphere while reflecting excess radiation out (Hallowes 2015; McMichael Woodruff & Hales 2006; Lu & Sanche 2001). Radiation is absorbed by greenhouse gases (GHGs); carbon dioxide (CO_2), chlorofluorocarbons (CFCs), methane and nitrous oxide, which occur naturally in the atmosphere. Increased concentrations of GHG (from industrial activity) is depleting the ozone layer which shields the atmosphere from excessive radiation resulting in an overall temperature increase being experienced on earth (McMichael, Woodruff & Hales 2006; Rau 2016). In order to maintain homeostasis, the ocean absorbs surplus radiation (Hallowes 2015). As more surplus heat is absorbed by the ocean, ocean temperatures increase and manifests as natural hazards (like extreme weather conditions) with knock-on effects on land conditions (Marcia 2012).

1.2.The capital-driven neoliberal world order

Neoliberal extractive economies are contributing significantly to the effects of climate change as their capitalist imperatives prioritise the accumulation of profit and economic power (Movement Generation n.d.). The rapid depletion of non-renewable resources, an increase in carbon emissions and the exploitation of ‘developing’ countries’ resources is consistent with the requirements of capital (Tverberg 2013; Marais 1997; Klein 2014). Neoliberalism thus refers to a set of economic policies that constitutes a form of managed capitalism (Cahill 2009), with its basic principles being the rule of the market (deregulation); privatisation; and globalisation (Debab 2011). Deregulation prioritises the removal of barriers to the market and diminishes the role of government in social and environmental systems as well as reduces expenditure on social services such as minimum wages and social grants (Castree 2008). The privatisation of state enterprises further allows space for the exploitation of marginalised groups by transnational corporations that can potentially

monopolise industries (Martinez & Garcia 1997). Smaller, local companies struggle to compete with TNCs, whose profits do not benefit the local country, but the TNC's country of origin. Furthermore, TNCs can avoid strict labour laws and environmental regulations in a region by moving their operations elsewhere. Consequently, the 'free' trade implications in an unconstrained global economy hinders the protection of local industries whereas multinational industries are protected (Feignbaum 1999). Globalisation - the social, economic, political and technological interdependence of people - favours the removal of national borders to open countries up to international trade (importing/exporting of goods) and investment without price controls and with fixed exchange rates (Amadi & Agena 2015). Competition and trade among countries in a global arena is encouraged as this supposedly improves efficiency and productivity while controlling inflation (Harvey 1984). The environmental impacts of these principles are devastating as carbon emitting transportation for international trade, packaging of goods with non-biodegradable materials and the extraction of resources for mass production is facilitated by these principles.

Consequent to these configurations, neoliberalism is described by its critics as "the lamentable spread of global capitalism and consumerism, as well as the equally deplorable demolition of the proactive welfare state" (Thorsen & Lie 2006: 2). Nevertheless, neoliberal discourse is legitimated through responses to such "attacks" as expressed, for example, by the Powell Memorandum² (1971: 15) which advises the corporate sector to recognize that the survival of the free market system is the primary goal, advocating for the re-education of academics to reduce hostility towards the corporate system by reconstructing public perception through "monitoring" of the media. Powell (1971) dismisses the perpetrators of these attacks as 'leftist revolutionaries' seeking to dismantle the global political-economic system. These arguments seek to naturalise neoliberal ideologies, hindering progressive political change. The normalisation and naturalisation of neoliberalism is further bolstered through the establishment of international organisations that, perhaps ironically, attempt to mitigate capital-driven environmental degradation from within the dominant economic framework, rather than from an ecological and social perspective (Marcia 2012).

² The Powell Memorandum (written by Lewis Powell to the U.S. Chamber of Commerce) is described as "a blueprint for corporate domination of American Democracy" (Cray 2011). Powell served as Associate Justice of the Supreme Court of the United States (1971 to 1987).

i. International institutions

a. Global governance

Regulating carbon emissions is secondary to the accumulation of profit in capital-driven economies (Fletcher 2012). Bond (2012) argues that global governance is a co-ordinated attempt on behalf of the global North to liberalise capitalism. An example of this exists in international and intergovernmental organisations such as the Intergovernmental Panel on Climate Change (IPCC) (of the United Nations), that acknowledge the Anthropocene and provides reports from the scientific community yet operate within the framework of globalisation. The independent international organisation, United Nations Environmental Program (UNEP), established the United Nations Framework Convention on Climate Change (UNFCCC) in 1992 to limit and reduce carbon emissions. Rather than setting binding limits to emissions, the UNFCCC endorses international treaties or protocols to be negotiated in order to reach the overall objective of reduced emissions. These treaties attempt to offer countries market incentives for reducing emissions and are negotiated amongst its members in the annual Convention of Parties (COP). Three conventions which significantly shifted the priorities and focus of the climate discussion include the Kyoto Protocol, the Copenhagen Summit (COP-15) and COP-16 (Cancun) and has been described as the “climate titanic” (Bond 2012: 4) that is leading climate action towards disaster. Potentially effective policies negotiated in these conventions are met with hostility from significant carbon-contributing countries, notably the United States, and the contradicting interests of national fossil fuel industries further hinder progressive climate action. Progress is further delayed by the limited access to proceedings of meetings given to civil society and the media, which results in limited public participation (and media coverage) and inadequate outcomes for negotiations (Fisher 2010). Evidence of this is the Paris Agreement (2016) in which parties accounting for about fifty-five percent of total greenhouse emissions submitted consent to the agreement. The Paris Agreement sought to unite nations to a common cause and to improve transparency of proceedings (United Nations (UN) 2016). Additionally, the agreement intended to keep the increase in global temperatures to below two degrees-Celsius and 1.5 degrees above pre-industrial levels. Nevertheless, in 2017 the United States, which is one of the largest carbon emitters globally, announced its intention to withdraw from the agreement as soon as contractually permitted, that is, after November 2020 (Keating 2018).

In addition to ineffectively regulating carbon emissions, according to the framework

of global governance, multinational institutions can implement policies that allow major institutions to benefit from a system that inadvertently exploits ‘developing’ countries in the global South who often overwork their scarce natural resources in order to participate in the global economy. The reduction in the carbon footprint achieved by organisations of the global North is countered in part, by the increase in environmental degradation and greenhouse gas emissions by the developing countries who mass produce raw materials, often as debt payments. For example, the North American Agreement on Environmental Cooperation, a subsidiary of the Commission for Environmental Cooperation (CEC)³, claims to protect North American ecology by allowing individual states to regulate the exploitation of their own resources (CEC 1993). TNCs can avoid the regulations of the individual states by moving operations to regions with less stringent regulations. This protects North American resources while exposing ‘developing’ countries to potential exploitation as TNCs often benefit from the less stringent environmental restrictions placed on them by UNFCCC convention agreements. In addition to global governance, global corporate enterprises use environmental discourse to further corporate interests (Kothari & Kothari 1993). This ‘climate-crisis capitalism’ is a strategy of the ‘global environmental managerial elites’ to turn a medium to long-term crisis into short-term commodification and a source of profit (Bond 2012). An example of this is the use of new technologies that are employed to clean water supplies polluted by acid mine drainage. While these technologies are important in reversing pollution in dwindling water supplies, it is only effective if the sources of acid mine drainage are stopped. In contrast, it has enabled mining companies to continue harmful activity, and in some cases, to increase such activity as technologies have been framed as a solution to pollution.

b. Transnational Corporations

Critiques of capital identify transnational corporations (TNCs) as co-opting ecological definitions of ecological sustainability⁴ to perpetuate the discourse of ‘sustainable development’ which posits that both economic growth and environmental protection are simultaneously possible, prolonging the “mismatch between climate change and market

³The CEC (2013) is a collaboration of North American governments claiming to “address environmental issues of continental concern, including the environmental challenges and opportunities presented by continent-wide free trade”.

⁴Ecological sustainability refers to the need to alleviate pressure on resources in the short-term to protect resources for coming generations.

domination” (Klein 2014b). This rhetoric serves to legitimate the imposition of free trade deals, preventing policymakers from implementing a transition to green energy, rather than confronting climate change and controlling and diminishing corporate behaviour (Klein 2014b). This notion of sustainable development initially entered environmental policy discourse around 1987 in response to the realisation that the impact of industrial activity destroys the environment and was proposed as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Coetzee 2016: 33). Subsequently, sustainable development has become conflated with environmental governance and international and national environmental laws (Coetzee 2016). Evidently, the term has been co-opted by international institutions seeking to prioritise development while protecting the environment becomes a secondary consequence.

One of the mechanisms of neoliberalism perpetuating this discourse is the World Business Council on Sustainable Development (WBCSD) which was formed through a merger between the Business Council on Sustainable Development and the International Chamber of Commerce in 1993 (Miller & Dinan 2015). The term continued to gain momentum in policy discourse until arguably being rearticulated during the 1992 Rio Summit (Coetzee 2016). During the 1992 Rio Summit, the WBCSD ensured industry-friendly resolutions on behalf of the represented corporate interests, resulting in the successful redefining of the concept of ‘sustainable development’ to suit corporate interests (Miller & Dinan 2015). The involvement of transnational corporations (TNCs) in environmental action escalated, resulting in the discourse of sustainable development and sustainable consumption becoming a prominent ideological framing for environmental concerns, in lieu of radically restricting economic growth (Miller & Dinan 2015). The discourse of sustainable development further contributes to the normalisation of neoliberal discourse, positing the possibility of environmental action amidst capital-driven ideological hegemony. This is further enabled by the inefficient policies put in place to regulate carbon emissions, mass production and trade. When ‘sustainable development’ is placed on the political agenda in ‘developing’ countries like South Africa, ecological concerns tend to be “compromised” by the primary socio-economic imperative to address poverty from within a neoliberal framework (Coetzee 2016: 15). This was made evident in president Cyril Ramaphosa’s speech at the African National Congress’s (ANC) campaign launch in January 2019. The speech prioritises developing the economy of the country and creating employment by increasing investment in mining, manufacturing and agriculture, as well as

by expanding export markets.

ii. Carbon tax policies

Another means of enforcing sustainable development is the practice of the Polluter Pays Principle (PPP) which seeks to regulate the cost of market activity by attempting to maintain economic efficiency (Cordato 2001). The PPP holds the polluter liable for the damage to the environment by taxing polluters according to their percentage of carbon emissions. Such policies suggest that damage to the environment can be compensated fiscally, without needing to confront the global economic system that pollutes. Nevertheless, PPPs do recognise that countries do not contribute equally to global carbon emissions and attempt to place the responsibility for managing pollution on countries with higher emissions (the United States in particular), who have historically evaded responsibility in mitigating the effects of climate change (Ibarrarán et al 2007; Marcia 2012; Caney 2006).

Large developing countries such as BASIC countries, Brazil, South Africa, India and China, are not required to reduce their increasing amounts of GHG emissions and are incentivised with compensated reductions rather than being set unfair and unattainable targets (Santilli et al. 2005). However, these strategies are often unjust. ‘Moderate’ Emissions Trading Schemes (ETS or ‘grandfathering’) offer incentives based to some extent on prior emissions (McKnight 2014). Grandfathering of carbon emissions allows countries to emit the same amount of emissions as they had before, ultimately intending to balance out emissions for each party by a set date (McKnight 2014). Nevertheless, the deficiencies of this strategy are clear: between the 1990s and 2000s, the global emissions of Annex I countries⁵ committed to emission reductions declined from 65 percent in the 1990s to 56 percent in 2000s while Annex I countries that are additionally committed to Kyoto specifically, declined from 41 percent to 31 percent (Muller 2005). Moreover, “non-Annex I countries had a share of 95 percent share of the emissions growth between 1990 and 2002” (Muller 2005:4). In other words, high carbon emitting countries will continue to emit high levels of carbon while countries’ involvement in the Kyoto Protocol diminishes.

⁵Annex 1 countries comprise industrialised countries who were previously members of the Organisation for Economic Co-operation and Development (OECD) in 1992 and Economies in Transition parties - the Russian Federation, the Baltic States and Central and Eastern European States (UNFCCC 2018).

iii. Merchants of denial

In addition to the “corporate capture of environmental policy” by international institutions (Miller & Dinan 2015: 100), critical climate action is hindered by denialist discourses. Contrarianism, also, ‘*denial*’ or ‘*scepticism*’, emerged in response to the threat of attributing the global ecological crisis to global capitalism and is perpetuated by corporations with shared material interests in undermining climate action (Miller & Dinan 2015). Denialism thus acts to “entrench the status quo of state and capital” (Bond 2012: 83). Fossil-fuel corporations in particular have supported United States’ congress in “energetically sabotag[ing] legislation aimed at capping emissions” (Bond 2012: 84) and have co-opted mainstream ‘green’ organisations (Miller & Dinan 2015). One example is the Global Climate Coalition (GCC), established in 1989 by corporate interests as an attempt to direct environmental discourse by lobbying and implementing PR strategies (Miller & Dinan 2015). Despite the GCC producing internal scientific assessments that undoubtedly acknowledge that anthropogenic climate change is occurring, the organisation continued to focus on undermining progress in the early 1990s (Miller & Dinan 2015).

Contrarianism further utilises technological optimism as a means of subverting climate action and proposes that technological development can effectively reverse the effects of climate change (Klein 2014; Bond 2012), similarly to how corporate interests redefined the concept of ‘sustainable development’. The Academy of Science of South Africa (ASSAf)⁶ asserts that “there can be no transition to a green economy without green technologies and technological innovation” (ASSAf 2014: 19). However, these green technologies, such as permaculture, water harvesting, and wind and solar energy should replace harmful industries, rather than being used simultaneously or to reduce the impact of harmful practices. For example, alternative green energy sources should replace fossil fuels, instead of using technology to clean acid mine drainage in water contaminated by mining. Using green technologies simultaneously to harmful practices conflicts with the progress made by alternative green technologies (Biello 2017). In this way, the argument for the use of technological solutions suggests that harmful activity can continue provided that it is regulated by products of the neoliberal regime⁷ (technologies). Technological developments

⁶ ASSAf (2014) seeks to advise the South African government on scientific matters that are of critical national importance.

⁷ The following articles were published in the *City Press* during the period of this study: “Drought crisis? Just turn air into water?” (Dlwati 2017) and “Yes you can turn air into water” (Harper 2016). The *City Press* also asserts, “It is only the City of Cape Town that has been actively searching for solutions, from desalination to drilling into aquifers” (‘Editorial: Cape’s water shortages a national crisis’ January 22, 2018).

(such as geoengineering and fracking) tend to be used by major corporations and think tanks to reinforce the neoliberal ideology that “uses the market to solve problems that the market created, without reconsidering the market itself” (Beder 2006). As scientific consensus is clear that climate change is irreversible, technology can only delay further disaster (Hallowes 2015) as the technologies that can make industry fully sustainable have not yet been developed (Bielo 2017). Nevertheless, the drive towards economic growth as well as “technological optimism⁸” has had significant influence on how climate change has been discussed (Boykoff & Rajan 2007; Bell 2014). For example, ‘zero discharge’ water programs have been developed which clean wastewater from coal mining so that it can be reused. These programs are considered green initiatives as they make wastewater reusable, yet they embed harmful mining practices more firmly in neoliberal practice. Fundamental alternative solutions are thus advocated for by environmentally-concerned theorists and activists (Aylett 2010).

1.3.The political-economic context of South Africa

South Africa is part of global neoliberal economic discourse. Forty percent of South Africa’s electricity is consumed by mining, petro-chemicals and metals-related activities (Bond 2012), a continuation of the racial-capitalist imperatives of the apartheid era. Apartheid’s restrictive policies that positioned the majority black population as subaltern subjects rather than as citizens, conflicted with capitalism’s requirement for growth and resulted in an economic crisis (MacDonald 1998; Marais 1997). The economic crisis was aggravated by increased international isolation, all of which set the foundations for the transition to a representative democracy. After a negotiated settlement⁹ in 1990, South Africa embraced neoliberal policy thereby neglecting participatory policymaking (Cock & Fig 2001; Klein 2011). These ideologies overshadowed anti-democratic, anti-neoliberal and anti-globalisation discourses and immersing South Africa in the global economic arena¹⁰ (Lodge 2002).

Integrating previously-excluded black populations into the economy involved collusion with white capitalist ideology (Bond 2000). This was consolidated by the Growth

⁸Technological optimism is scientific discourse suggesting that industrialisation and technological developments will alleviate environmental concerns and resource constraints.

⁹As state oppression dwindled, a complete overhaul of the apartheid system no longer seemed paramount and colonial structures remained unchanged and controlled by privileged white interests (Lodge 2002).

¹⁰The IMF negotiated a loan with the caretaker government that limited state intervention in the economy through privatisation and deregulation (Marais 1997).

Employment and Redistribution strategy (GEAR) in 1996¹¹. GEAR was a structural adjustment program that was intended to facilitate economic growth by liberalising the market (Adelzadeh 1996). This neoliberal rhetoric influenced environmental action in South Africa in a number of ways: the state budget for environmental management was reduced; commercial farming was supported in lieu of land restitution; and pollution from mines and factories was not adequately controlled as a result of inadequate market regulation (Cock & Fig 2001). Adelzadeh (1996) asserts that the neoliberal framework in which GEAR operated was unnecessary and harmful considering that international institutions no longer had any leverage over the newly liberated southern African region and no political-economic crisis required imminent changes to policies. Moreover, there is no example of adjustment programmes similar to GEAR improving social issues such as unemployment and alleviating poverty anywhere in the global South (Cock & Fig 2001; Adelzadeh 1996). In 2005, GEAR was replaced with the Accelerated and Shared Growth Initiative for South Africa (ASGISA), during then President Thabo Mbeki's administration and, later, with the New Growth Path under the administration of Jacob Zuma, both of which lacked adequate planning for ecological issues, despite environmental movements in the country changing with the country's political transition.

1.4. Environmental activism in South Africa

Early environmental activism in South Africa mirrored the elitist and racist attitudes of United States conservationism that focused predominantly on the green environment (fauna and flora). Dominating ideologies were deeply-rooted in “white privilege, power and possession” (Khan 1990: 23). Reflecting the ideological transformation accompanying the end of apartheid, environmental organizations became more socially responsive and willing to adopt practices of environmental equity, considering the needs and perspectives of the working class (Khan 2002). Environmentalism shifted from focussing exclusively on ‘green’ issues to focussing more explicitly on ‘brown’ issues in order to consider the social impact of environmental degradation that affects human rights and basic needs (MacDonald 2002; Khan 2002). Community activism thus began to foreground environmental justice and social transformation, thereby seeking to improve quality of life and to contest abuse of power (Environmental Justice Networking Forum (EJNF) charter 1992). This alternative environmentalism combined brown and green politics and redefined ‘ecology’ to include

¹¹The ‘non-negotiable’ policy was endorsed by Trevor Manuel, co-chair of the Green Climate Fund at the time.

social issues, encouraging participation amongst black South Africans and former anti-apartheid activists (MacDonald 1998; Cock & Fig 2001). The changes in attitudes to ecology had significant consequences for the development of policy and legislature, as existing environmental policy from the apartheid era did not adequately reflect the social and political changes experienced at the time (MacDonald 1998). Providing previously excluded groups with the technical and financial assistance required to participate in and make informed decisions about environmental planning thus became a vital focus for new environmental organisations.

Nevertheless, insufficient consideration of the deeper structural issues presented with the entrenchment of the new democracy in the global market has been made since the transition to democracy (MacDonald 1998). Although ‘brown issues’ have been placed on the agenda for discussion, sustainable, long-term solutions to ecological issues have not been adequately implemented. Moreover, environmental organisations belong to nascent social movements with a tendency to be fragmented in terms of social and ideological incentives (Cock & Fig 2001). Additionally, still mirroring the development of environmentalism in the United States, the imperative towards ‘sustainable development’ was placed on the agenda. This persists today and is evident in South Africa’s involvement in the World Economic Forum in Davos which focused on globalisation and the fourth industrial revolution in January 2019. South Africa was represented at the meeting by its ministers of International Relations, Finance, Trade, Communications, Public Enterprise, Economic Development and Health. Despite the forum acknowledging and supposedly prioritising the severity of the global climate crisis, and the forum occurring during the ‘day zero’ period in South Africa, the minister of Environmental Affairs was not present.

i. The just transition and regenerative economies

Despite the lack of sustainable approaches to environmentalism post-1994, a robust movement advocating for an ecologically sustainable economy has emerged. More recently, the movement to a just transition has been muted. The just transition was initially consolidated by alliances between different interests adversely affected by polluting industries and seeks to undo beliefs that there are unlimited natural resources and that capital-driven growth can continue unchecked (Barrett et al. 2017). The movement advocates for strategies of democratisation, decentralisation and diversification of economic activity, diminishing consumption, redistributing resources fairly and empowering working-class

communities (Movement Generation n.d.).

Instead of extractive economies, or economies based on the extraction of natural resources, the just transition position proposes the necessity of implementing a regenerative economy, realigned with values of “ecological restoration and community resilience and social equity” (Movement Generation n.d.: 15). This is a rheomodic approach that suggests that social inequality leads to ecological destruction as a result of disharmony and imbalance (Movement Generation n.d.). Accordingly, resources, labour, culture and governance should comprise zero-waste, interdependence, dynamic balance and biodiversity. To achieve this, a just transition must “shift economic control to communities; democratize wealth and the workplace; advance ecological restoration; drive racial justice and social equity; relocalize most production and consumption and retain and restore cultures and traditions” (Movement Generation n.d.: 17). This transition, it is argued, should occur on an enterprise level (greening fossil fuel industries) as well as on a national level (phasing out harmful practices and transitioning workers) and a community level (Smith 2016). Aspects of the just transition have been inserted into international regimes¹² and in 2015, the United Nations’ International Labor Organisation formulated guidelines for a just transition towards environmentally sustainable economies and societies which emerged from negotiations amongst unions, employers’ organisations and governments (Smith 2016). Additionally, the International Trade Union Confederation (ITUC) exists, and is a global union demanding a just transition focussed on workers, with a particular demand for the formalisation of green jobs associated with climate disasters (Smith 2016).

1.5. Aggravated natural disasters

Natural hazards such as drought are unavoidable phenomena. In neoliberal discourse, natural hazards are termed disasters when the environment, economy and livelihood of the population of a region is affected and when the hazard coincides with a level of vulnerability (Dilley et al 2005; Pandey, Bhandari & Hardy 2007; Ibarrarán et al. 2007). In this framework, biophysical and social vulnerability is measured by macroeconomic performance or the loss of economic assets rather than by the effect it has on populations who depend on natural resources (Ibarrarán et al. 2007). Regardless, the consequences of climate change extend far

¹²The preamble to the Paris Agreement (2015) was modified to add: “Taking into account the imperatives of a just transition of the workforce and the creation of decent work and quality jobs in accordance with nationally defined development priorities.”

beyond macroeconomic performance and, therefore, studying the changes in the Earth's average temperature alone is insufficient in assessing the impact of climate change (Thomas et al. 2007). To critically examine how people are affected by climate change, one arguably needs to contextualise disasters in the social and scientific relationship (Thomas et al. 2007).

i. Extreme weather conditions (drought) in Africa

Despite having contributed the least to global CO₂ emissions (Nelson et al 2009; IPCC 2013; Boko et al. 2007), Africa and the global South are more vulnerable to the impact of climate change than the global North, as fifty percent of the impoverished community in Africa rely on lands that are highly affected by natural hazards (Ibarrarán et al. 2007). Africa's low adaptive capacity is the consequence of widespread poverty and insufficient capital, historical inequality that has led to complex governance, conflict and commerce-driven environmental degradation (Boko et al. 2007). An IPCC report constructed as a guide to meeting the Nationally Determined Contributions (NDCs) or reduction goals set in the Paris Agreement (2015) asserts that even a 1.5° Celsius increase could have a devastating and irreversible impact on Southern Africa (2018). It has been estimated that "a global average temperature increases of 2°C translates to up to 4°C for South Africa by the end of the century" (IPCC 2018). In turn, natural disasters, particularly drought will occur more frequently in the area and it is projected that 250 million Africans will face water-stress by 2020 while 200 million Africans are estimated to die because of climate change by end of the 21st century (IPCC 2007).

Drought is Africa's most common disaster and occurs in arid and semi-arid regions (Schulze 1997; Ibarrarán et al. 2007; Loretti & Tegegn 1996). Semi-arid areas, such as South Africa experience high temperatures and low rainfall (an annual rainfall lower than 700mm) and have very low productivity during dry periods (Woodhouse & Ganho 2011). The southwestern region of South Africa has a Mediterranean climate where rainfall occurs during the winter months and seldom exceeds an average annual rainfall of 600mm (Wild 2015). Temperatures can reach highs of 40-degrees Celsius owing to the small desert area in the northwest as well as the temperate interior plateau and the subtropical climate in the northeast which intensifies the already limited rainfall. Additionally, South Africa's climate is affected by a combination of complex El Niño and La Niña weather patterns. El Niño increases the temperature of the South Pacific Ocean altering global rainfall patterns, particularly reducing rainfall in southern Africa while La Niña is considered the reverse of this process and cools

sea-surface temperatures (Rouault 2015).

South Africa's complex climate is aggravated by climate change which impacts on the global environment and the life sustained on the planet (Easterling et al 2002; IPCC 2007; Engelbrecht 2015). Over the past fifty years, South Africa's average annual temperature has increased "by at least 1.5 times the observed global average of 0.65 degrees Celsius" and extreme rainfall events (such as flash floods) occur more frequently (Ziervogel et al. 2014: 606). Moreover, South Africa had already been experiencing extreme weather events in the years leading up to the drought discussed in this study. In 2011 the dry region of the Northern Cape experienced floods; in 2012 winter floods occurred in summer rainfall areas in the eastern region, with the Eastern Cape experiencing extreme flooding, and in 2014 heavy flooding in KwaZulu-Natal was followed by severe drought. The severe lack of rainfall has resulted in the worst drought in a century (Rouault 2015; Stoddard 2017). The drought was officially classified as a disaster in five provinces in 2015 and the consequent water shortages were declared a national disaster in 2018. The drought occurring during the period discussed in this study, is attributed to intensified El Niño conditions and weakened La Niña conditions that occurred since the first quarter of 2015 (Stoddard 2017; Rouault 2015). Furthermore, South Africa's primarily extractive and agrarian economy contributes to conditions of extreme water stress. Paradoxically, as a result of water scarcity brought on by the drought, sixty percent of the country's water is used to irrigate crops that are internationally regarded as rain-fed crops¹³ (Rutherford 2010). Information from the scientific community explaining these effects of climate change often requires interpretation in order to be accessible to the public and policymakers. As such, the media is vital tool for making information accessible.

1.6. Contextualising the *City Press* in the South African press landscape

The current South African press landscape retains strands of its colonial and apartheid past with mainstream organisations existing primarily as corporate institutions, limiting their capacity to serve as neutral purveyors of political action. Since its inception in the colonial era, the South African press existed to further English and Dutch (Afrikaner) interests, with an alternative (black) press existing in the margins (Finlay 2016; Tomaselli, Tomaselli & Muller 1987). The National Party's interests were protected by legislature which existed to censor or limit media content resulting in the suppression of oppositional voices in the

¹³Irrigation is the biggest water consumer in the region (Bronkhorst, Pengelly & Seyler 2017)

mainstream press (McDonald 2004). Jim Bailey's *Drum* represented a significant shift of black-targeted newspapers to the mainstream. Owned by the South African Newspapers Association (the English press), *Drum* adopted an indirect oppositional stance by portraying the lives of black urban people. The publication is recognised as being a vital mouthpiece for resistance to the apartheid regime in the 1950s (Chapman 2001) while simultaneously being captive by white ownership (Touwen 2011). Two decades later, Bailey launched the *City Press*, which sought to serve the interests of a similar market of black urban readers. Owing to financial struggles under the ownership of Jim Bailey (of the English Press and South African Associated Newspapers) in 1984, the *City Press*, alongside *Drum* and *True Love*, were sold to Nasionale Pers (now Naspers)¹⁴, a known supporter of the National Party, thus placing the publication in a curious position of being a black newspaper owned by Afrikaner interests. The decision was made in an effort by Bailey to save the publication rather than ending the enterprise entirely. The editorial team, led by then-editor, Percy Qoboza, remained with the publication, maintaining its credibility as an objective and critical publication (Kalane 2018).

Presently, news media in South Africa targeting black populations no longer exist on the margins as the alternative press but have shifted to the realm of mainstream media. Reflecting on the United States' capital-driven press industry, Chomsky (1997) describes mainstream media as typically highly-resourced and profitable organisations belonging to media conglomerates, enabling them to have a wide reach and to play a significant role in setting the news agenda. The same is true in South Africa (although on a smaller scale) as conglomerates such as Media24 are driven by capital and the profit made by corporate owners, thus seeking to stimulate economic growth by frequently disregarding public good, limiting consumer choice and overpowering smaller enterprises (Emdon 1998). Nevertheless, it is argued that media conglomerates tend to position themselves as objective sources of information while simultaneously representing powerful economic interests (Emdon 1998). This intertwining of corporate and cultural interests is evident in South Africa where the mainstream press is controlled by four companies (Media24, Independent Newspapers, the Times Media Group and Caxton CTP). Despite a conscious effort being

¹⁴Naspers is a Johannesburg and London Stock Exchange listed company and has the largest market capitalization of any media company outside the US and China. "We believe in the power of local backed by global scale and we look for opportunities to address big societal needs in markets where we see the greatest growth potential" (Naspers 2018).

placed on dismantling the oligopoly of press ownership (Finlay 2016) and on transforming the media after the transition (Daniels 2013), the number of mainstream publications has declined because of constricted ownership which further hinders press freedom (Daniels 2013).

The *City Press* is an example of the ambiguous positioning of mainstream news media, owing to its radical role during apartheid and its current commercial obligations. Nevertheless, former editor of the *City Press*, Ferial Haffajee notes that the “spirit of *Drum* journalism is still very much in *City Press*. The elements of this are a strong sense of social justice and campaigning for the underdog” (Haffajee in de Waal 2012). The *City Press* is owned by Media24, the print media arm of Naspers, a multinational internet and media group leading the South African media market (Finlay 2016; Duncan 2011). Evidence of the publication’s long-standing ambiguous positioning lies in the *City Press*’s Inaugural Wealth Index report, which questions the lack of transformation in enterprise by asserting that South Africa’s corporate elite remains “whiter than ever” (van Rensburg 2018). Ironically, Naspers owner Koos Bekker, appears in the top fifty of the index, a position that is attributed to his shares in Naspers (van Rensburg 2018).

The *City Press* is also a Sunday newspaper which has a greater capacity for critical and detailed analysis and opinion than dailies (The Media Online 2017). Sunday papers in South Africa still have high circulation and readership figures and generate significant advertising revenue. In 2017, Sunday newspapers reached 8.7 million readers cumulatively while advertising in Sunday newspapers can potentially reach 4.9 million people (The Media Online 2017). The *City Press* is an English-medium newspaper which has been described as having “considerable influence” over what is placed on the agenda for public discussion in the country and is generally considered to have significant “credibility and clout” (de Waal 2012). In 2014, the year leading up to the declaration of drought as provincial disasters, the *City Press* was described as the second most influential English-language newspaper in South Africa (Marketing Site 2014). Its aim is described as being “to speak truth to power ... and [to be] an essential news resource for those in positions of influence and power” (Haffajee in Marketing Site 2014). My study focuses on the *City Press* because environmental concerns, even that relating to environmental policy, tend to fall outside the paradigm of mainstream journalism, thereby limiting public opinion on environmental politics and policies.

My research project:

The goal of my research is to analyse representations of drought in this single mainstream title, the *City Press*. Because my analysis is driven by a concern with environmental justice, this first introductory chapter located my research in the realm of environmental studies and the global economy. Chapter 2 presents the theoretical framework of this study which is located, firstly, in the critical Cultural Studies paradigm. Cultural Studies' concern with power relations and the inequalities constituted within discourses is useful in understanding the *City Press*'s coverage of the drought crisis. Secondly, locating this study in within the locus of Journalism Studies helps provide insight into how particular topics become news and why the drought has been framed in particular ways by the *City Press*. Chapter 3 outlines my methodology and the various approaches and methods used in this research. Qualitative methodology facilitates a holistic approach to understanding how the drought has been covered, and facilitates deep contextualisation of five sample texts, enabling me to analyse coverage within the context of institutional and broader socio-cultural frameworks. Chapter 4 presents a critical textual analysis that probes the representations of my sample of news texts, while Chapter 5 provides a summation of my findings.

CHAPTER 2 – A CONCEPTUAL FRAMEWORK

Introduction

This chapter presents the theoretical framework for my investigation into the coverage of the drought beginning in 2015 in the South African newspaper, *City Press*. As I am concerned with representations of drought in the *City Press*, two strands of theory are particularly useful, namely, Cultural Studies and Journalism Studies. The Cultural Studies paradigm offers a theoretical frame relating to language, meaning and culture, while Journalism Studies provides insight into journalism as an institution or discursive regime, as discussed below. The first section of this chapter outlines the critical Cultural Studies approach and draws on the circuit of culture (du Gay 1997), wherein representation is proposed as a significant moment. Additionally, this constructionist approach addresses how representation interlinks with relations of power and the production of knowledge as ‘truth’. To this end, I adopt a discursive approach informed by the ideas of Foucault (1981). The second section moves to Journalism Studies to consider normative theories regarding the role of journalism in democratic societies. This body of knowledge is crucial for this research, particularly in terms of the ‘monitorial’ and ‘facilitative’ roles described by Christians et al. (2009). Moreover, journalism can be understood as a discursive regime in a Foucauldian sense where certain practices are presumed appropriate. I therefore discuss the norms and routines implicit in the described journalistic roles. Two theories are particularly useful to understanding what discourses dominate within texts, namely agenda-setting and framing.

2.1. A critical Cultural Studies paradigm

Adopting a Cultural Studies framework is appropriate for this study on account of its focus on popular and/or marginalised cultural spaces rather than attending to elite or ‘high culture’ (Hall 1997). The paradigm is useful for investigating whose interests are privileged, elite or popular, as well as what meanings are constructed, “who has the power to circulate particular meanings at the expense of others, and the social impacts of these meanings” (Steenveld 2000: 81). As it pertains to this study, a Cultural Studies paradigm enables an interrogation of the ambiguity of the *City Press*’s corporate nature and direct link to capital as well as its mandate to hold the powerful to account informed by journalistic values and roles.

A critical Cultural Studies project moves beyond understanding culture as inherent or unchanging and views it as a historicized and dynamic endeavour (Hall 1997). Cultural

Studies provides an interdisciplinary approach to understanding the construction of meaning which governs and regulates knowledge, social practices and behaviour. Consequently, the paradigm is concerned with the relations of power, notably those that underpin mass and marginalised cultures.

Two theoretical approaches that have been pivotal in the development of Cultural Studies are structuralism and poststructuralism, both of which are concerned with the construction of meaning and the role of meaning-making in culture (Barker 2010). Structuralism recognises that social structures are complex and have a particular configuration (Hall 1985) and thus enables the researcher to discern patterns in social practices such as language (Barker 2010). It further considered meaning to be wholly determined by the economic structures of society. Poststructuralism moves beyond structuralist understandings to consider such patterns and meanings as relevant but more fluid (Barker 2010). In addition, although this study follows the trajectory of Cultural Studies in shifting away from a reductionist focus on meaning as determined by the economy, the concept of ideology or the relationship between the lived experience and material conditions, remains useful in understanding power relations. Cultural Studies has since expanded to incorporate Foucauldian notions of discourse and power, which speaks to understandings of subjectivity and representation, also discussed in this chapter.

While focussing on the text and the production of the text, this thesis draws on the circuit of culture, to ensure a holistic approach to the research question. Cultural meaning is constructed over time and at various moments, rather than in a single instance. Meaning is distributed through different processes and practices which form what du Gay et al. (1997) refer to as the circuit of culture. The radical contextualisation of a symbolic form, that is, interrogating the form from multiple moments and investigating how these elements co-construct each other, provides insight into how the particular form is operating in a specific context and instance (du Gay et al. 1997). The circuit of culture comprises five interrelated moments or processes: representation, identification, production, consumption and regulation (du Gay et al. 1997b). In this paradigm, representation refers to the relationship between language and meaning. Language gives things meaning by attaching words and definitions to them (du Gay 1997). However, language itself is arbitrary because associated meanings are socially determined and may change over time (du Gay 1997). Identity describes how these things that are represented by language are used by people to construct

social profiles which give meaning to themselves or groups, or to ascribe meaning to other things (du Gay 1997). An individual's lived experience or social practices form part of this identity. Production refers to the construction of signs and codes at an institutional level. Institutions construct meaningful messages in their own interests. However, contradictory or contesting meanings can exist within an institution and conflict can arise when different identities within a unified institution attempt to produce a unified meaning (Champ & Brookes 2010). There would arguably be no production without consumption (Mackay 1997). Consumption refers to how texts/symbolic forms are mediated (Hall 1997). This moment on the circuit is concerned with how mediated symbolic forms are used in people's everyday lives (Mackay 1997). Audiences have an active role in producing meaning from texts and attaching symbolic significance to what they chose to consume. As such, consumption choices can be seen as linked to a consumer's sense of identity and subject positioning (Mackay 1997). Regulation refers to the governing of meanings and describes "the effort to fix meanings outside of the practices that we would normally associate with the processes of production and consumption" (Champ & Brookes 2010: 576). The construction of meaning of news texts through production and consumption is regulated by the normative roles of the media and includes legislature and policy. While acknowledging that the circuit is complex and that one moment cannot exist in isolation from others (Champ & Brookes 2010), this study is concerned primarily with representation while recognising the significance of the other moments in relation to meaning-making.

i. Representation

This study employs a constructionist approach which understands representation as the "production of meaning through language" (Hall 1997: 17), differentiating between the material form of a word (denotative) and its symbolic meaning (connotative). In this approach, two systems of representation exist. Firstly, a set of mental concepts are attributed to objects, people and events in order for individuals to interpret the world meaningfully. Such concepts not only refer to the material world but also to abstract or intangible ideas. However, these concepts only become meaningful when they are shared (Hall 1997). To communicate meaningfully with others, a shared conceptual map is necessary. Language is thus the second system of representation as it is the process of constructing meaning. People encounter various sets of representations that are governed by codes and signs (sounds, text and images, among others) (Chandler 2018). As a system, language is governed by rules which facilitate shared understanding of signs and one is limited by the boundaries of the

system (Champ & Brookes 2010). As such, a sign is only meaningful when it adheres to certain rules, which themselves are subject to cultural influences and shifts in meaning (Hall 1997). The constructionist approach recognises that language is socially constructed, and that translatability is “fixed in culture” (Hall 1997: 17) but cannot be fixed in language. Language is comprised of codes which are historically determined and can be rearticulated to produce different meanings (Tomaselli, Tomaselli & Muller 1987). An example of rearticulating codes pertinent to this study exists in the co-option of the term ‘sustainable development’ which initially signified ecological stability and integration with nature but has since been re-articulated within a discourse of unlimited growth and material development to refer to prioritising economic development over environmental development.

ii. Theorising power: from ideology to discourse

This study adopts a discursive approach consistent with the broad shift in Cultural Studies from an approach that foregrounds ideology to a discursive approach informed largely by Foucault. Early 1970s and 1980s Cultural Studies scholars refer to the concept of ideology in their theorising of power. Ideology is understood as a system of ideas shared by a group that represents social beliefs (van Djik 1995). These ideologies help social actors interpret the world and serve as a basis for social practices. Early understandings of ideology suggested that, as ideologies are shared by social groups, they are related to structures in society, such as the economy. In this view, ideology is embedded in power dynamics as the social elite determine what ideologies dominate. These views of ideology were considered negative and as a means of subordinating particular social groups. Critical Marxists understandings of ideology is concerned with how people become conscious of their position in society in relation to the mode of production and how, upon realisation, contest it. Such notions of how “meaning is created in the service of power” (Thompson 1990: 5) is useful in understanding how different positions struggle for dominance or hegemony (Gramsci 1999) in any discursive field. The understandings of ideology as existing only in the service of dominant interests (Thompson 1990) has largely been superseded by a multidisciplinary approach which considers that there are many types of ideologies, including resistant ideologies (van Djik 2006). Ideology in this context is considered to be beliefs that are shared by members of a group in society and are perpetuated and normalised through public discourse (van Djik 2006).

Ideologies are understood as being imbued with power - they can be inculcated by the elite who largely control access to discourses through their position and authority (discussed below) (Fairclough 1998). Language is thus considered a locus of ideology which is often propagated through rhetorical devices (see Chapter 3) (van Djik 2006). For this reason, I retain aspects of Thompson's (1990) theorising of power which have particular value for this study. In particular, Thompson (1990) identifies five modes of operation of ideology, namely, legitimisation, dissimulation, unification, fragmentation and reification and describes various rhetorical strategies that are typically associated with each of these modes. These are valuable when probing how they are deployed to serve specific relations of power (see Chapter 3).

In keeping with the trajectory of Cultural Studies, this study adopts a discursive approach which concerns itself with interplay of knowledge, power and social relations. As this study undertakes a critical analysis of news representations (through language), my eclectic discursive approach retains the aspects of Thompson's conceptualising of ideological strategies.

iii. Discourse, knowledge and power

To investigate texts produced by the *City Press*, this study adopts a Foucauldian approach that is concerned with "discourse as a system of representation" (Hall 2001: 72). Representation comprises discursive work and is considered to be interwoven with other social practices and power relations (Hall 1997). This approach views discourse as moving beyond the linguistic, to the material, for example, discourses relating to farming methods or irrigation practices (Hall 2001). As such, this approach is concerned with the rules and practices used to construct meaning and regulate discourses. Discourse is imbued with power as it functions through regulation and uses technologies of power to regulate behaviours (Foucault 1979). It is thus concerned with relations of power and how people are constituted as subjects of discourse by embodying particular subject positions (Foucault 1981).

Firstly, I focus on the objects of discourse, that is, on knowledge and 'truth'. Discourse produces knowledge by constructing statements about the object and regulating how the object is talked about. Discourse is "a group of statements which provide a language for talking about - a way of representing - a particular kind of knowledge about a topic" at a particular historical moment (Hall 1997:44). For things to have meaning in the material world, knowledge - meanings attached to things - about things must be produced through

discourse (Hall 1997). For this reason, all meaning is produced through discourse (Foucault 1981). It is only within culturally and historically specific discursive formations that an object can exist meaningfully. Nothing has meaning outside of these formations as material things only become objects of knowledge when constituted in discourse (Hall 2001). Consider for example, the three green arrows connected in a Mobius loop that is associated with recycling. Without familiarity with environmental discourse, the symbol may not be interpreted in this way and may seem meaningless. Because ‘truth’ is constructed discursively, it can continuously be rearticulated according to the context and time and is thus historicized (Hall 1997).



Figure 1: Mobius loop (recycling symbol)

Knowledge is linked to power as those in authority are in a position to produce what counts as ‘truth’ (Foucault 1981). There are no power dynamics that do not have a corresponding field of knowledge. Because there is no essential truth that can be passed down hierarchically, Foucault (1981) suggests that power is not a ‘sovereign’ act of domination but is dispersed and pervasive; it permeates every level of social existence implicating both the oppressed and the oppressor, as both perpetuate the system of power relations. Because representation is entangled with relations of power, those with power have the authority to define ‘truth’ (Foucault 1981). Discourse works to limit meanings by determining who is privileged to speak and what they can speak about (the object of the discourse) and can thus be used to regulate action and opinion (Foucault 1981). Power, Foucault insists, does not merely control and subjugate but is productive. By producing rituals of truth, discourse limits as well as reproduces power (Foucault 1981). Power is thus productive to the extent that it produces the subjects of that particular ‘truth’ (Foucault 1981) and “seeks to make populations the object of its own knowledge, and to change the behaviour of the populations in specific ways through specific and multiple technologies” (Grossberg 2010: 172).

Subjects of discourse are produced by technologies of power which are strategies used to regulate social practice. The subject is consequently decentralised in Foucault’s conceptualisation, as it is discourse, not the (human) subject of discourse, that produces

knowledge (Hall 2001). Although the subject constructs meaning, s/he does so from within a particular discursive formation. The subject is however, never outside of the dynamics of knowledge and power and is constituted as both the product of power as well as a producer of ‘truth’. Subjects adopt particular subject positions by embodying particular subjectivities (Foucault 1981). We are thus produced as subjects but embody discourse in our physical acts. How one is constituted as a subject will then depend on the range of discourses to which one has access. Discourses with similarities between them, that is, refer to the same object; share the same style; are governed by the same concepts; or follow similar themes, have discursive unity (Hall 2001) and form discursive formations that sustain ‘regimes of truth’ that appear to be ‘common sense’ (Foucault 1981; Cousins & Hussain 1984). Journalists are constituted as subjects of the discursive formation (or regime) of journalism and operate largely within the boundaries of the body of knowledge accepted by such subjects at a particular historical juncture (Foucault 1981). The discursive regime of journalism presumes a range of practices as appropriately informing decisions. A set of codes and routines regulate their conduct. An example is the prohibition of ‘chequebook journalism’ by most journalistic institutions that consider themselves democratic. This prevents journalists from paying sources for stories or information as this casts doubt on the legitimacy of the story. Subjects are however not confined by these regimes and can potentially contest or struggle against power relations (Foucault 1982). Furthermore, a single discursive formation can be found across a range of objects and can regulate the conduct of different discursive regimes (Foucault 1981). For example, a discourse of sustainability is circulated in both capitalist enterprises with an emphasis on tax incentives on green policies, as well as in environmentalism as ‘sustainable development,’ which seeks to find a middle ground between a functioning economy and environmental destruction.

Because of the possibility of multiple discourses existing in a space, discourses can and do constantly struggle for dominance. This insubordination (refusal of remaining subordinated) of subaltern discourses is necessary for power relations to exist (Foucault 1982). Sustaining relations of subordination and domination requires a minimal amount of direct coercion (Purvis & Hunt 1993). Discourse employs a range of strategies in order to maintain dominance (Tomaselli, Tomaselli & Muller 1987). Foucault (1981) outlines internal and external strategies; procedures of exclusions; and internal procedures. Procedures of exclusions include prohibition, division or rejection of discourses and the opposition between truth and falsity. Prohibition refers to the constraints set on discourses

by either placing a taboo on particular discourses, elaborating a ritual around circumstances of speech or controlling who has the privilege of speaking, resulting in only qualified voices being expressed. Alternative discourses are rejected and limited to demarcated arenas. Critical environmental discourse is arguably confined to niche areas of alternative journalism and within particular discursive regimes. Furthermore, what becomes defined as the ‘truth’ is determined by institutional practice and through these procedures of exclusions.

Foucault’s (1981) internal procedures (the process of rarefaction) reduce what is said regarding a particular discourse, so that it can be managed through accepted discursive practices in society. This is achieved through commentary, which privileges some texts and whereby texts exist hierarchically with some texts act as commentary of others. For example, news reports often reference reports from UN working groups or the IPCC. ‘Accepted’ discourses and information are repeated and normalised. Authors of particular texts (or ‘opinionistas’ are legitimated and considered ‘reasonable’. In this way, discourse limits what is said by establishing rules which define what is considered legitimate knowledge. In addition to the restrictions placed on the propagation of discourses, there are conditions placed on who can access particular discourses. First, there are societies of discourses in which discourses are circulated in a closed space and members of the society adhere to conventions which set further constraints. Second, doctrines, or social appropriations, are discourses of a particular group which is then disseminated to a wider group. The speaking subject can only enter a discourse on specified conditions. They must adhere to rituals and only privileged positions can speak with authority. These procedures allow particular discourses to become dominant without being put in writing.

In a similar vein, strategies of affirmation, sanctions and discursive procedures outlined by Tomaselli, Tomaselli and Muller (1987) include restriction, shielding and appropriation. Restrictions limit who may speak and can take the form of censorship (active) or indirectly through the governing of social relationships (Tomaselli, Tomaselli & Muller 1987). Shielding discourses use primary validators or elite voices to speak to avoid contesting discourses. An example of this exists in the over reliance of corporate voices in reporting of the drought. Appropriation refers to how discourses are compartmentalized (Tomaselli, Tomaselli & Muller 1987), for example, the tendency to address drought from a human-interest angle; the drought is causing people to struggle; such personal challenges render it as inappropriate to divert attention from the political and economic aspects of climate change.

Although multiple discourses can and are frequently articulated in texts these potential meanings are regulated by the codes of various discursive regimes that limit how the text is produced and consumed (Foucault 1981). For example, because of the political climate of the country, such as where there is public distrust of government officials, a reader may dismiss an article about climate change causing the drought as political rhetoric seeking to garner oppositional political support and divert attention from the lack of city planning leading to water shortages.

2.2. Journalism as a discursive institution

News media are ambiguously positioned institutions that act as corporate entities while being driven by social responsibilities that surpass its profit-making imperative (Alexander 2015; Revers 2013; Ryfe 2012). News practitioners are argued to recognise this ambiguity by forming a “cultural division” between what is produced as a cultural product and what is produced as a commodity (Alexander 2015: 15). This division is largely a consequence of the normative understandings of the roles of journalism in society that can be understood by considering the field of journalism as a discursive regime or apparatus. This separation further allows journalists to maintain their role of providing information while functioning as the ‘watchdogs’ that hold the state and corporations accountable within a democratic dispensation (Wahl-Jorgensen et al. 2016), or a “monitorial” role, as discussed below.

Christians et al. (2009) speak about the role of press in democracies as fourfold; collaborative¹⁵, radical¹⁶, monitorial and facilitative. The two of these that are most pertinent to this study are the monitorial and facilitative roles. These two roles are discussed here as they most accurately describe how news media function in South Africa and are closely aligned to the *City Press*’s news ethos (see Chapter 1). The monitorial role describes the media as an interlocutor between news events and participating parties as well as the public, thereby informing the public of relevant events, conditions and threats while monitoring powerful institutions and states. This understanding emphasizes the open nature of the media as surveyors of the social environment which operate in service of the receivers of information (the public) rather than for the benefit of the agents of control (Christians et al. 2009). In this role, the media work alongside other social actors and, in doing so, they serve

¹⁵Christians et al.’s (2009) collaborative role describes the media as a channel between the government and the public, notably encouraging national development.

¹⁶Christians et al.’s (2009) radical role enables critical participatory democracy by giving citizens a platform to constructively criticise government.

as an essential resource for information and public opinion (Christians et al. 2009). The *City Press* has at various moments embodied this role, particularly in its reporting of the South African presidential corruption scandal, playing a significant role in holding then president, Jacob Zuma and other political stakeholders to account through rigorous investigative journalism (Basson 2012). In addition to the monitorial role, news journalists in South Africa have at times adopted a facilitative role which acknowledges that public opinion requires critical debate and collective wisdom. The facilitative role describes how the media enables public participation and deliberation by giving agency to the public (Christians et al 2009). This view assumes that the public will form opinion on an issue when they are involved in a discussion rather than passively being fed information (Christians et al 2009). The media thus attempt to provoke active engagement and communication amongst its audiences. The *City Press* adopts a facilitative role particularly within their ‘Voices’ section which seeks to share various stakeholders’ opinions and to encourage debate amongst readers. This is often useful in providing a subjective approach to news (discussed below). Furthermore, *City Press* has made online comments (through the social media platform, Facebook) open, allowing the public to share comments and respond to comments regarding articles. These comments are regulated by the *City Press*’s Comments Policy.

To better understand how representations in news media come to be, it is useful to consider the influences that exist within the journalistic regime and which obscure the divide between the cultural and economic imperatives of journalism. The authority to decide what information is considered ‘true’ and of value exists hierarchically, with changes at the higher levels trickling down and informing changes at a micro level. The influences that impact on the production of news texts are theorised by Reese and Shoemaker (2016) who describe micro and macro influences on five levels, namely the individual, routine, organisational, institutional and ideological. At an individual level, journalists form individualised cognitive, performed and imagined roles. Secondly, at a routine level, the norms and practices of a media organisation reflect journalistic practices. Thirdly, at an organisational level, economic and political factors can influence the values and mandates of an organisation to which journalists need to adhere. The organisational practices of discursive regimes define the behaviours of its subjects (du Gay 1997). The fourth level describes institutional concerns. Journalists are governed by laws and regulatory bodies which hold them accountable, based on normative assumptions of journalism. Finally, at the fifth ideological level, journalists tend to act consistently with the discourses that dominate in the

broader social sphere that they inhabit. Recognising these influences is vital in understanding the construction of news texts by practitioners, as they constitute routines, values and content.

i. Constructing news

Coverage of environmental news events is significantly influenced by the external factors (including sceptical discourse and expansionary mind-sets) discussed in Chapter 1 and by internal production factors (Boykoff & Rajan 2007). The selection of events to be constructed as news items is informed by a set of news values which govern what is considered ‘newsworthy’ (Carvalho 2007). The construction of news involves decisions about how an event will be framed, which voices will be privileged, as well as editorial and economic considerations resulting in certain discourses being privileged (Carvalho 2007). Topics deemed un-newsworthy are omitted. Contesting or alternative discourses are not necessarily omitted from news texts but are given less authority as the elite voices or interests tend to be prioritised through the discursive strategies in place that enable the powerful to exercise power (to produce truth). As a result, important occurrences are often underreported, and the coverage is largely decontextualized and/or inadequately reported (Tomaselli, Tomaselli & Muller 1987).

To better understand how some events come to be considered news, Galtung and Ruge (1965) theorised the concept of newsworthiness. This was later reworked by Harcup and O’Neill (2017) who theorise that news is not merely reported by journalists but produced by them. News values are an indication of the “organisational, sociological and cultural norms” of newsrooms and further intersect with economic factors (Harcup & O’Neill 2016: 1473). Analysing news values provides a means of understanding how media texts are constructed by news producers and practitioners to satisfy their organisational and institutional requirements (Harcup & O’Neill 2016). For a story to be considered newsworthy, Harcup and O’Neill (2016) suggest at least one of fifteen, and preferably more than one, values must apply to an event before it is likely to be considered newsworthy. Nine of these values which most immediately apply to hard news are: bad news; conflict; drama; follow-up (of a previous event); the power- elite; relevance (to the readers); magnitude; good news; and organisational interests (decisions must be consistent with organisational values).

To further refine the set of news values outlined above to speak particularly about the political-economic context of news journalism, two sets of journalistic norms described by

Boykoff and Boykoff (2007) are useful as political news is influenced by normative orders (Bennett 1996). Firstly, first-order journalistic norms refer to personalisation, dramatisation, and novelty. Personalisation describes how stories that engage with the micro-level of society are favoured over those at a macro-level. In other words, the media is inclined towards human interest stories of individual struggles and victories, rather than the political and economic structures and processes. For example, rather than discussing the neoliberal world order that has led to drought, the media may focus on a single farmer who has been affected by drought. Dramatisation works to undermine the intricacies within the structure of macro institutions such as government and policy. For example, news reporting would rather focus on how United States president, Donald Trump, refused to agree to the Paris Agreement rather than discussing the limitations of global governance and the persisting lack of commitment to environmental policy by the United States. Novelty echoes the ideas of newsworthiness discussed earlier, as what is recent, brief and easy to consume takes precedence. For example, an article about the immediate devastation caused by the drought would have preference over a story about the underlying causes and long-term effects of drought in a warming climate. Together these first-order norms inform a second-order of journalistic norms, which Boykoff and Boykoff (2007) argue has led to information bias in reporting of anthropogenic climate change. These second-order norms are authority-order and balance. Authority-order norms suggest that expert voices, that is, those of the elite in society, tend to be expressed more frequently and with greater credibility than others: a report published by UN researchers is given greater precedence than a report issued by an affiliated group of researchers. If an event is not represented or spoken about by the authorities of an ‘authorised’ discursive regime, it is considered un-newsworthy. Furthermore, the imperative to create ‘balanced’ reports can potentially garner either support for or antipathy towards issues such as climate change. By attempting to ‘balance’ certain unassailable issues as in the discussion of anthropogenic climate change, one removes the urgency, relevance and dramatic interest of the issue, thereby undermining its newsworthiness or deeming it ‘un-newsworthy’ (see *Objectivity*).

ii. Organisational routines

In addition to news values, representations in news texts are influenced by institutional practices which affect the construction of meaning and influence public discourse. Journalistic norms and routines are critiqued for erasing context when discussing complex issues, yet context is pertinent when discussing complex and technical knowledge (Corbett & Durfee 2004). Four organisational norms and routines pertinent to this study

include objectivity, scientific uncertainty, the use of journalistic language and economic pressures.

a. Objectivity

Within the discursive regime of journalism, balance or objectivity serves as a journalistic ideal. Objectivity, a value argued to have been lacking in adversarial journalism (Ettema & Glasser 1998), presumes the application of an empirical, non-subjective method of reporting that requires journalists to remain neutral and to present an unbiased portrayal of facts. It impels practitioners to provide both sides of an argument and not express personal opinion. Many journalists now consider this value to be outdated (Ettema & Glasser 1998). When updating their Code of Ethics in 1996, the Society for Professional Journalists¹⁷ omitted objectivity from its code. It is suggested that journalists should practice “mature subjectivity” which comes from experience and a ‘gut feeling’ about an issue, rather than obstinately remaining objective (Ettema & Glasser 1998: 23). The ‘gut feeling’ of journalists is often indicative of the discursive regime to which they belong and the discourses which they have embodied (Ettema & Glasser 1998). For example, a story about a convicted serial killer would not need to defend the killer to the same extent that it condemns his actions, because dominant discourses in society constitute murder as unethical.

Objectivity can also obscure other journalistic values (Ettema & Glasser 1998). Contrarianism is enabled by the norms of balance which emphasises dissent despite the consensus in the scientific community (Miller & Dinan 2015). ‘Objectivity’, ‘neutrality’, ‘impartiality’ and ‘balance’ influence what is said about climate change in the media (Boykoff & Rajan 2007). When confronted with opposing claims from primary validators, the journalistic norm of providing balance results in both sources being represented equally, even though the consensus may lie on one side of the argument, particularly when it serves the position of the elite (Corbett & Durfee 2004). Aiming to provide equal attention to both sides of the climate change debate legitimates the opinion of a small minority of the scientific community who deny the occurrence of anthropogenic climate change (Corbett & Durfee 2004; Carvalho 2007). Moreover, the repetitive use of privileged voices of sceptics results in the illusion of ‘common sense’ or the misconception that “journalists speak with one voice” on an issue (Tomaselli, Tomaselli & Muller 1987: 24). Researchers suggest that

¹⁷The United States institution, the Society of Professional Journalists (SPJ) is the oldest organization representing journalists, existing since 1909.

constructing balanced news stories is less of an ideological imperative but more a routine, as “the typical journalist, even one trained as a science writer, has neither the time nor the expertise to check the validity of claims” (Dunwoody & Peters 1992: 210). To provide accurate reporting of complex issues, particularly on climate change, would require that this norm be modified (Wilson 2000).

b. Uncertainty

Scientific and environmental journalism is constructed using the same news values as hard news without adequately accounting for the complex technical nature of the scientific process and scientific knowledge. Scientific statements avoid stipulating a conclusive truth but position themselves as achieving the closest approximation to truth at that moment in time, through empirical studies and by replicating these studies to reduce ignorance (Corbett & Durfee 2004; Babbie & Mouton 1982). As a result, even where there is scientific consensus, scepticism is provoked by emphasising the margin of uncertainty in the scientific process (Boykoff & Rajan 2007; Corbett & Durfee 2004). Research has shown that the media’s representation of climate change has focused on ignorance, which implies that there is a lack of information to conclude with absolute certainty that climate change is occurring, at the same time understating the value of the degree of scientific consensus regarding the issue (Corbett & Durfee 2004). Because one cannot say with all certainty that a claim is absolute ‘truth’, it is argued that representations of certainty are constructed in specific contexts and have particular implications (Corbett & Durfee 2004). Often, uncertainty in the scientific community is interpreted as a complete lack of knowledge on the subject (Corbett & Durfee 2004). Rather than report an unrepresentative balance of opinion, uncertainty should be placed in the context of the scientific process (Corbett & Durfee 2004), as climate scientists unequivocally agree that anthropogenic climate change is occurring (Cook et al 2013).

c. Language

As language is intrinsic to representations of meaning, the mediation of complex ideas poses a challenge to reporting on climate change. The lexicon and use of language by the scientific community is different to that used in news journalism and the broader public (Boykoff & Boykoff 2007). Information from the fields of science, technology and ecology tends to be communicated in cautious language emphasising probability which does not translate into the clear unambiguous language valued by the press, potentially provoking the

assumption of scientific uncertainty in relation to the information (Boykoff & Boykoff 2007). While scientists may describe research using cautious language, journalists and policy-makers have the difficult task of translating scientific ideas into clear commentary to facilitate opinion and decision making (Boykoff & Rajan 2007). Studies showed that journalists - even those working predominantly in the science beat - found difficulty in understanding the science around climate change and as a result, dissent was exaggerated, and consensus undermined (Parks 2018; Corbett & Durfee 2004). Because attitudes are constructed, perpetuated and rearticulated in media coverage while others are omitted, it is vital that journalists reporting on issues have adequate understanding of the science (Carvalho 2007).

d. Economic pressures

The news values and routines described above are often superseded by economic pressures which reconstruct the journalistic discursive regime (Boykoff & Rajan 2007). Economic pressures from an increasingly digitised media environment have seen news media organisations having to adapt their core values according to the requirements of new economic models that are sustainable in this new environment (Harcup & O'Neill 2017; Boykoff & Rajan 2007). Despite digital news platforms providing a growing space for potential in-depth, critical analysis and commentary, the resources required for organisations have been diminished (Wahl-Jorgensen et al. 2016) as competitive strategies tend to require journalists to produce content at a faster pace and for a wider audience. A notable adaptation has been a shift in production to being more significantly market-driven (Nixon 1997), with stories that appeal to advertising demographics of the media organisation being prioritised over stories that may otherwise be considered pertinent and newsworthy (Harcup & O'Neill 2017).

Commercial imperatives are described as having resulted in a “disinvestment in news-gathering and a decline in specialist correspondents” in the United States (Miller & Dinan 2015: 99). This is certainly also the case in South Africa. The purchase of Independent News & Media South Africa by Sekunjalo Independent Media (SIM) is evidence of this. Sekunjalo has a 55 percent controlling interest in the news organisation which is “funded in part by the state through the South African government-owned Public Investment Corporation (PIC) and the Government Employees Pension Fund (GEPF)¹⁸” (The Media

¹⁸Additional stakeholders include a trust linked to the ANC’s Umkhonto weSizwe Military Veteran’s association, Mandla Mandela, and South African BRICS council representative Sandile Zungu.

Reporter 2015). In 2013, SIM chairman, Iqbal Survey had been accused of abusing power by dismissing then editor of the *Cape Times*, Alide Dasnois. Dasnois had written a front-page article regarding the public protector's report into a controversial fishing tender obtained by parent company, Sekunjalo Investment Holdings¹⁹. The issue coincided with the passing of Nelson Mandela and rather than changing the front-page story, editorial opted to commemorate Mandela's passing by running a wraparound tribute, which is cited as the reason of Dasnois' dismissal. This catalysed an exodus of journalists from the organisation.

Because of the changing media landscape and rapidly converging newsrooms, media organisations have had to reconstruct and alter business models. This has led to a decrease in the population of newsrooms and in turn, a change in the roles of journalists, who are now expected to act as generalists rather than specialise in a niche topic (Boykoff & Rajan 2007). This shift in economic models of news organisations has also contributed to the decrease in investigative journalism with additional economic pressures resulting in a rise in infotainment and entertainment in lieu of critical, in-depth reporting. Insufficient training and time constraints further affects reporting on climate science (Boykoff & Rajan 2007). New business models have led to journalists becoming increasingly reliant on news subsidies as well as participating in 'churnalism' (Lewis, Williams & Franklin 2008; Miller & Dinan 2015) - the reliance of news subsidies or pre-packaged material from corporate interests and recycled stories already published online (Davies 2008). The increased pace as a result of online platforms and the demand of exclusivity has resulted in journalists having less time to provide in-depth and critical analyses of news events (Miller & Dinan 2015). This is particularly true of daily newspapers and online-only publications which require constant updates about an event. Weekly newspapers, like the *City Press*, on the other hand, have a greater capacity for in-depth reporting as there is less resource constraints and readers anticipate greater detail. There remains a strong tradition in South Africa of Sunday newspapers being a source of weekly insight into political economic events (The Media Online 2017).

iii. Agenda-setting and framing

Two theories of Journalism Studies useful to understanding how favoured discourses come to dominate in texts are agenda-setting and framing. An important function of the

¹⁹ The article titled 'Docked Vessels' describes the public protector's report accusing the former Minister of fisheries of awarding a tender to Sekunjalo irregularly.

facilitative role of news media is setting the agenda for public discussion (McCombs & Shaw 1972; Scheufele & Tewksbury 2006). By setting the agenda, news media play a significant role in influencing what the public discuss and consider to be of importance. If an issue is given media attention, audiences tend to judge the issue as significant as well (Scheufele & Tewksbury 2006). For example, climate change was put on the agenda for discussion in 2017 when the Trump administration of the United States declared it would pull out of the Paris Agreement. Although this issue was placed on the agenda, the proceedings of the negotiations were not discussed in depth, and the United States' lack of active participation in the past under previous administrations was not discussed as thoroughly. Furthermore, the limitations of the meetings were not addressed, thus framing international governance as the solution to the climate crisis. As a result, it appears to the public as though critical climate action is progressing and only being challenged by this isolated event. Thus, the media do not only direct attention towards a topic by placing it on the agenda, it also diverts attention away from issues by omitting it from discussion (McCombs & Shaw 1972).

The agenda-setting theory is valuable in understanding coverage of climate change and science-based topics because such topics require audiences to be decidedly motivated to engage with technical understandings. Human attention has been described as a scarce commodity, particularly in an increasingly digitised environment which prioritises speed and convenience. The ‘attention economy’ management theory suggests that people need to be sufficiently motivated to investigate scientific concerns (Ungar 2000). Because climate change is a long-term process, it does not have daily relevance and consequently, the public tends to be disinterested in the issue (Corbett & Durfee 2004). To enable a better understanding of climate change and the gravity of the issue, it is necessary for it to be placed on the agenda for discussion by news media.

While the drought has been placed on the agenda to some degree (see *Sampling* in Chapter 3), this study is concerned with how the drought has been framed. Framing refers to how the process of selecting and emphasising particular aspects of an issue in order to define the issue in a particular way, determines its causes and suggests moral judgements and solutions (Entman 1993). In other words, framing is a means of organising discourses of narrative structures based on particular conventions in order to explain “who is doing what, and with what purpose” (Ardèvol-Abreu 2015). These conventions include simplifying information to adhere to routine limitations and to make information accessible to audiences

as ‘interpretive schemas’ for processing and meaningfully interpreting information (Gans 1979; Goffman 1979; Scheufele & Tewksbury 2006).

Frames work by creating a link between two concepts, for example, by establishing a link between drought and its impact on the economy or between the drought and the consequences of climate change. These links can help to interpret information. Audiences can further incorporate their own pre-existing interpretations, understandings and experience into the information provided (Nisbet 2009). For this reason, framing works more effectively when audiences have a relative pre-existing relationship with the issue in order to pick up on the connections (Nisbet 2009). Journalists with pre-existing relationships to the issue can use frames intuitively or intentionally as this tends to emphasise the appeal of an issue to audiences. If journalists with an inadequate understanding of climate change are constructing stories about drought due to limited resources for more knowledgeable journalists, these intuitive links that would frame drought as being attributed to climate change are not made. The use of frames can also be informed by news values (Richardson 2006; Nisbet 2009) which journalists tend to rely on to frame the drought.

Because framing a message involves certain associations and omissions during the construction of the message, alternative discourses may be obscured or backgrounded in the process (Simon & Xenos 2000; Entman 1993). For example, by focussing on corruption within a particular political party, one overlooks the failures of the democratic system that allows the abuse of power. The angle of coverage that is foregrounded tends to resonate with pre-existing dominant discourses in society (Scheufele & Tewksbury 2006; Shoemaker & Reese 1996; Nisbet 2009). For example, the economy is presumed to be of great importance to the public and, within a neoliberal discourse, is frequently framed using medical metaphors; the economy is rendered a living body that feels and bleeds. Notably, then chairman of the US central bank, Ben Bernanke describes credit as “the lifeblood of the economy²⁰” (Walker 2010) and the British *Guardian* asserts that the economy “flatlines” (Wintour 2011). In contrast, climate change which has a severe impact on the Earth and our lives, is not adequately discussed in the public and not critically debated in the political sphere (Nisbet 2009). The way climate-related issues are framed in news media can arguably encourage public opinion potentially change the dominating discourses regarding climate

²⁰“Credit has morphed from the lifeblood of the economy into a pathogenic drug ... It has ceased to support healthy functions, real commerce and wealth creation, by being channelled into things that destroy social and economic tissue” (Benneke in Walker 2010).

change, as its framing in news media is vital in facilitating public participation and informed decision making (Corbett & Durfee 2004; Nisbet 2009).

iv. Science and environmental journalism

This study recognises that facilitative media are mandated to interpret information from the scientific information for the public and is thus vital in constructing public opinion on climate change and subsequent extreme weather events. South Africans described as those who actively seek out scientific information and possess a scientific literacy of ninety percent, are clustered together by segmentation analyses as “urban, moderately literate and moderately educated” while the group utilising newspapers, print media and the internet for information are described as the “urban, moderately to highly literate, and highly educated” (Guenther & Weingart 2018: 53). Coincidentally, this is representative of the *City Press*’s digital and print demographics as both these population groups are predominantly male, have an above-average income and a university degree (Ads24 2018). Fifty percent of this cluster are found to access scientific information from newspapers, thirty percent from print media and 31 percent from internet (Guenther & Weingart 2018). Consequently, because framing messages in certain ways tends to have unique effects on different publics, to facilitate critical engagement with the public on scientific issues such as aggravated extreme weather, specialists need to strategically target particular publics (Guenther & Weingart 2018). This is vital for climate action as a greater level of science literacy tends to result in positive attitudes towards science which in turn garners more support for funding (Guenther & Weingart 2018; Allum et al., 2014; Bauer, Durant & Evans 1994; Sturgis and Allum 2004). Furthermore, a higher level of scientific literacy tends to influence more favourable attitudes towards science (Guenther & Weingart 2018), and if there is a positive perception of science, there is also more support for its public funding and policy-making (Guenther & Weingart 2018; Muñoz et al. 2012).

Nevertheless, where science is reported on in mainstream news publications, it tends to be demarcated to a niche category or ‘beat’ or omitted. Media organisations often divide topics covered up into beats, such as ‘news’ ‘business’ or ‘voices.’ When a topic is driven by a current newsworthy event, such as a drought crisis that impacts on the elite, it is constructed as ‘news’. Environmental issues are often grouped together with science journalism as many environmental concerns are based on scientific evidence. The same news values and routines associated with the ‘news’ beat is applied to the science beat and in turn,

environmental issues. This arguably leads to inadequate coverage of events as scientific information comprises complex and technical ideas and jargon and often struggles to engage with the public. Furthermore, news journalism tends to be event-driven, while environmental issues often unfold over a longer term. Nevertheless, mainstream news media tend to omit the science beat altogether as a result of various organisational constraints as discussed earlier. As a result, if an event relating to the environment is not deemed newsworthy, it is omitted from the agenda. Environmental issues thus tend to be framed as a ‘news’ or ‘business’ concern.

Conclusion

This conceptual framework developed to analyse representations of drought in the *City Press* has been theorised in relation to the Cultural Studies and Journalism Studies paradigms. Knowledge and understanding of the prevailing droughts in South Africa reach most citizens through the news they encounter. This knowledge is gleaned from media representations and produced by journalists. Therefore, this chapter begins with outlining Cultural Studies as the informing framework and gives specific attention to two moments of the circuit of culture. Additionally, the Journalism Studies framework is theorised to understand how aspects of the drought are deemed newsworthy and how they are discussed in the media. This framework informs the methodologies used in this study which is discussed in the next chapter.

CHAPTER 3: METHODOLOGY

Research Question

This thesis recognises that the media play a significant role in constructing public opinion about climate change and that journalistic representation of ecological disasters impact on public opinion and political action. The broad research question is: How is the ongoing drought (declared a disaster in 2015) represented in the mainstream South African news publication, *City Press*? The aims are both to identify and analyse the discourses articulated in the selected news texts. Consequently, this study is qualitative and adopts a social constructionist approach (Hall 1997), and it undertakes a critical textual analysis of selected news texts published in the *City Press* pertaining to the topic of this study.

Qualitative Methodology

This qualitative study seeks to identify representations of drought in the South African publication *City Press*. Qualitative research methodologies involve a holistic strategy that seeks to contextualise research (Babbie & Mouton 2001). This is useful to this study as contextualising texts representing drought in relation to other aspects of the circuit of culture (particularly their production) can allow for a more holistic analysis. As such, it is useful to use qualitative textual analysis in combination with other methods (Johnson 1987). To this end, I initially set out to combine textual analysis and open-ended qualitative interviews with *City Press* journalists to produce a well-rounded analysis of the framing of the drought crisis substantiated by an interrogation of the factors of production of coverage. Due to time constraints, the managing editor of the *City Press* insisted on journalists responding to questions via email before ultimately declining to participate in the interview process, citing time constraints and the publication's focus on political issues as the reason for the institution's withdrawal from the research process.

Nevertheless, because contextualisation is a vital aspect of qualitative methodologies seeking a more thorough understanding of an issue, I situate a single event within its position in the greater societal context to fully understand a particular phenomenon (Babbie & Mouton 2001). That is, I contextualise news media coverage of the three-year drought within the neoliberal political-economy in which South African mainstream newspapers exist, as well as in the broader global paradigm in order to posit that representations of drought in mainstream news coverage could potentially influence political climate action and climate policy.

3.1. Textual analysis

To describe the hegemonic ‘truths’ that emerge from the *City Press*’s coverage of the drought, I conduct a textual analysis of a selection of news texts published by various *City Press* journalists. My concern with how drought is represented in the mainstream publication involves a critical inquiry into how meanings are articulated within texts. This focus on the construction of meaning in news texts is essential in understanding the ideological and cultural position they contain (Fursich 2009). Furthermore, textual analysis is useful in identifying recurring patterns in texts as well as in determining what is assumed to be common understandings and what is omitted from the text (Fursich 2009), as these discourses can normalise or contest a particular ideological standpoint.

Textual analysis views texts as complex constructions that comprise a set of culturally contextualised discursive strategies articulated through language (Fursich 2009). It is thus vital to see the text not as an isolated product but as an expression of social dynamics (Richardson 2008) produced by discursive subjects. By decentring the text, it can be studied in its cultural and social contexts, broadening the scope of analysis (Johnson 1987). Texts comprise either implicit or explicit meanings which are influenced by its social context and may open or limit the range of meanings or discourses found within the text (Curtin 1995). Textual analysis is thus useful in understanding the representation of social phenomena and their relationships in texts (Richardson 2006).

This study works in the spirit of Critical Discourse Analysis (CDA) which is both an approach to qualitative research and method of research. CDA is concerned with providing an interpretation of texts in relation to the context that produced it (van Djik 2006), and further interrogating the different meanings expressed in these texts and their claims to truth (Prinsloo 2009). It draws on Fairclough’s (1992) three-dimensional model which comprises (a) a description of the text, (b) interpretation of the context of its production and (c) an explanation of its socio-historical context (see *Figure 2*).

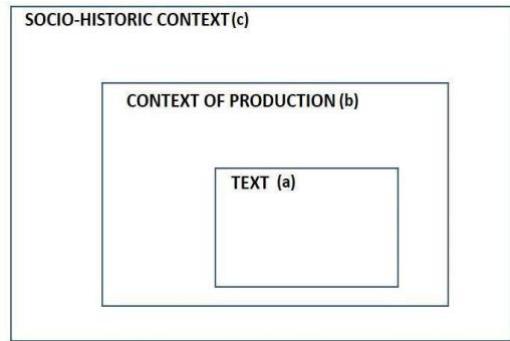


Figure 2: Fairclough's three-dimensional model (1992)

i. Sampling methods

This study analyses news coverage by the *City Press* owing to its ambiguous positioning as a mainstream economic enterprise (owned by Naspers) as well as serving the monitorial and facilitative roles of news media in a democracy (see Chapter 2). Furthermore, the *City Press* is a Sunday newspaper which is argued to provide a greater capacity for critical coverage than dailies.²¹ A sample of five texts was drawn from *City Press* reports published online and accessible from their website (www.citypress.co.za). My decision to investigate online texts in this study was informed by online texts being more widely accessible than print texts. Furthermore, the readership of the online platform is not exclusive to *City Press* readers, but also readers interested in the drought crisis specifically, as they would search the internet for ‘drought’. The *City Press* also shares its online news articles with its sister-site *News24* which has a significant readership. Moreover, online platforms have less stringent resource constraints in comparison to print.

The online search of the *City Press* articles over a three-year period (1 January 2015 to 31 January 2018) produced a database of texts. The selected timeframe marks the year of the initial declaration of five provincial disasters as a result of the drought and ends after the declaration of the same crisis as a national disaster, coinciding with the announcement of ‘day zero’ in the Western Cape - the projected date that the city of Cape Town would run out of water (which has since been postponed as winter rains elevated dam levels in the area). Articles were further identified using an online ‘Google News’ search of articles published by the *City Press*. In line with the focus of the research, the keyword ‘*drought*’ was used to

²¹2018 circulation figures show that weekend publications have a circulation of 1 306 436 while dailies have a circulation of 1 051 223.

identify relevant news texts. While it might be anticipated that this would result in a large sample considering the impact it was having on society at large, only 26 texts with '*drought*' in the headline or lead or as a Search Engine Optimisation (SEO) tag were identified. From these 26 texts, a sample set of five texts were derived for deeper analysis, informed by the thematic analysis discussed below. These five texts were deemed to be adequately representative of the how drought is discussed throughout coverage of the crisis. Because the drought was most frequently covered in 2016, I selected two articles published in this year.

3.2.Broad Thematic Analysis

Five sample texts were selected based on a broad thematic analysis which identified and categorised the recurring themes and frames across the broader database of 26 texts. This informed a careful selection of five sample texts for a more nuanced and critical analysis of the recurring themes. The thematic analysis involved several steps which was loosely followed for the purpose of this study. The first phase involved familiarising myself with the data through repeated readings as proposed by both Hall (1997) and Fursich (2009). Then, an initial set of codes was produced from the data which each identify a particular aspect of the semantic content of the data (Braun & Clarke 2006). I established that these codes were predominantly noun phrases occurring in the texts and describe an aspect of the text, for example, '*agriculture*', '*devastating disaster*' or '*rain*' (see Appendix 6). Enough surrounding data was included to retain the context of the code and individual extracts were coded into as many categories as necessary, for example, '*water*' is coded as '*water-levels*' or '*water-restrictions*' to retain the context of its use. As many codes as possible (195) were identified within a reasonable timeframe (February 2018 to June 2018). Codes which appeared across a range of texts were grouped together into themes allowing for a deeper interpretive analysis (Braun & Clarke 2006). Microsoft Excel was used to quantify the data from which prominent themes emerged (see *Table 1*).

Code	No. of instances
human-centred	4
fiscal losses represented in Rands	5
food price	5
water restrictions	5
river levels /lakes levels	5

agriculture, agricultural industry, crops (maize), farming output	6
corporations (names, titles)	6
livestock, animals, meat	6
farmers, emerging, commercial	7
economy, finance, GDP, food price, inflation	8
residential/household use, supply, wastage	8
water supply, water shortage, water use	9
infrastructure: boreholes/reservoirs/dams	9
rain, rainfall, (lack of) rain	10

Table 1: Thematic analysis codes (with conditional formatting indicating frequency)

Strong themes emerged across the collection of texts. Most articles mentioned the lack of rainfall attributed to the drought, as well as the fiscal cost of the drought and the need for the development of urban infrastructure. I grouped similar themes together to broaden the categories. From this, two major themes were identified for the entire database: drought and the agricultural economy, and drought and urban infrastructure. Five texts which best exemplify these themes and contain a significant number of the codes were selected (see *Appendices*).

3.3.Critical textual analysis - macro and micro approaches

My study is undertaken in the spirit of CDA. The purpose of this is to provide a critical description of texts in relation to the context that produced them and to interrogate the different meanings expressed in the texts and “their claims to truth” (Prinsloo 2009). By analysing discourse, this social constructivist approach concerns itself with the power dynamics of society that lead to the construction of meanings. Acknowledging that discourse and language is imbued with power, shifts CDA’s focus beyond neutral analyses of language to look at the critical implications of the use of language (Fairclough 1998). This approach suggests that representations in texts comprise various selections and exclusion of meanings, all of which influence the dominant readings of texts.

In this study, I employ linguistic concepts which are invaluable to textual analyses of news texts. The structuring of news texts comprises meanings and intentions which are conveyed through the form and content of the text, which should be studied as interrelated aspects of the text (Richardson 2006). This study considers two aspects of the structure of news texts: the structuring of propositions (micro textual analysis) and the combining of propositions (macro textual analysis). The structuring of propositions describes

representations in texts and involves an “analysis of clauses representing actions, processes and events” (Richardson 2006: 46). The second aspect is concerned with how these representations are organised into a coherent text, i.e., narrative and rhetoric/argument (Richardson 2006). This study combines an analysis of these two aspects to produce a critical account of representations in texts.

i. Micro textual analysis

The micro textual analysis I use in this study comprises, firstly, a lexical analysis of the words used to convey meaning. I then consider how sentences are constructed by analysing syntax and transitivity as well as the modality of sentences. Because not all meaning in texts are explicit, I consider presupposition to better understand the latent meanings of texts. The micro analysis cannot be distinct from an analysis at a macro level, as this analysis is an interconnected process. The macro analysis thus considers rhetoric, or the language used to persuade audiences, and the narratives that play out in the texts. I finally consider the modes of operation of ideology in texts, informed by Thompson (1990). Each aspect of analysis contributes to establishing a broad and detailed interrogation of the *City Press*'s coverage of the drought.

a. Lexical analysis

Lexical analyses are useful in understanding attitudes towards particular social actors as the choice of words used to name and reference individual social actors has symbolic (connote) meaning. The choice of words used in texts conveys value judgements of society and can frame a story in a particular way or can be used to credit or delegitimise social actors (Richardson 2006). For example, describing ‘hordes’ of emigrants rather than ‘large groups’ of emigrants makes a particular value judgement. Communication also has indexical or social meaning which interprets what is said and what is produced. For example, the text ‘Veterans left high and dry’ (Paddy Harper, *City Press*, May 06, 2016) ascribes connotations that constructs veterans as having particular value to society and thus should have their basic needs attended to and reiterates the news value of human-interest. Lexical analysis looks at the participants involved in the reporting processes while transitivity is concerned with the participants involved in texts and the relationships between the roles they play (Richardson 2006).

b. Transitivity analysis

The ideational function of language, that is, its symbolic function, is concerned with the construction and maintenance of an experience and is realised through transitivity. Transitivity can thus be described as “a system that construes the world of experience into a manageable set of Process Types” (Halliday 2004: 170). Processes have three components, namely, the process itself, the participants in the process and the circumstance of the process (Simpson 1993). Transitivity processes are clauses that represent “actions, events and different processes [and] serve to encode how an action is performed [and] how the speaker or reader encode in language their mental representations of the world” (Holopainen 2005: 13).

These processes are described as verbal, mental, relational or material processes²² (Richardson 2006). Verbal transitive processes describe spoken acts including speaking, whispering and murmuring. Mental processes are cognitive, such as thinking, wondering and deciding, as well as of feeling (e.g. fearing). Relational processes describe a state of being and involve an agent and an attribute (Richardson 2006). These include: *have*, *seem*, *be* and *is*. Finally, material processes are doing actions and can be further divided into transitive actions which have an agent and an object of action (*the flood destroyed the house*), and intransitive action which involve just one participant (*the dam overflowed*). Referencing of social actors can be further affected by passivisation and nominalisation. Passivisation removes the agency of the actor by removing specificity and precision. For example, the soldiers in the headline, ‘unpaid Zimbabwean soldiers...’ (Unpaid Zimbabwean soldiers could fuel popular protests, *City Press*, July 17, 2016) are described passively while ‘Nomvula mislead Zuma (Masondo, *City Press*, 2016)’ is active. The circumstances of a transitive process refer to any subsidiary action associated with the main fact (unpaid Zimbabwean soldiers could fuel protests (emphasis added)). Nominalisation describes the generation of nouns from word classes, often verbs. Agency of actors tend to be obfuscated by nominalisation (Amadi 2010). For example, saying ‘*government must develop infrastructure*’ has a different meaning to ‘*development of infrastructure is required*’. In the latter phrase, the imperative to develop infrastructure is no longer placed on the government.

c. Modality

While the journalistic discursive regime values objectivity in reporting events,

²² Two additional processes are sometimes referred to: behavioural and existential (Fairclough 1995; Janks 2005)

meaning is often implied through the “degree of commitment” of the writer to propositions as inferred by certain modal claims (Richardson 2006: 59). Modality thus links the content of a text and its function by describing the judgments, comments and attitudes of claims. Such claims can connote possibility, obligation or emphasis. Modal verbs (*may*, *could*, *should* etc.) and adverbs (*certainly*, *really*, *likely* etc.) indicate modality and make judgements about topics and are often used in editorial and opinion genres, for example, “we *must* act now to turn drought crisis around” (emphasis added) (Appendix 4).

Modal claims vary in degrees of certainty and can range from absolute (extreme weather *will be* aggravated by climate change), to varying degrees of hedging (climate change *could* lead to aggravated weather conditions). Modality is expressed in two forms: truth and obligation. Truth modality has a degree of certainty to imply that a proposition is the ‘truth’, for example, ‘industrial practices *will* cause climate change’. Obligation modality, often indicated by the verbs ‘*must*’ or ‘*should*’, implies a degree of commitment or certainty about future events. Obligation modality can be used in news texts to overestimate the seriousness of an event and can be used to support deliberative arguments (discussed below). For example, ‘we *must* stop harmful industrial practices’ has a more authoritative tone in comparison to, ‘we *ought to* stop harmful practices’, which implies that harmful practices are likely to continue.

d. Presupposition

Implicit meanings can be concealed within the explicit claims made in news texts and particular words can be used in texts to invoke this latent meaning (Richardson 2008). These words can be change of state verbs which imply a particular state that is being changed (‘she must *stop* running!’ implies she is currently running) or implicative verbs (the climate bill didn’t *manage* to get enough votes). Presupposition can also be indicated by definite articles which can incite presuppositions (‘*the* drought has economic impacts’ is referencing the drought that is currently occurring, while ‘*a* drought has economic impacts’ suggests that any drought circumstance could have an impact on the economy). Moreover, ‘W- questions’ (*why*, *when*, *who* etc.) that are often used in editorial pieces, have both explicit and implied meaning. For example, the rhetorical question, ‘*yet what has the environmental minister done to prepare for the drought?*’ could be explicitly asking for facts about has been done or could imply that something should be done about the drought.

e. Rhetorical Devices

Because news texts often use figurative language to persuade readers of a proposition,

news should be considered a discursive genre, as discursive genres seek to persuade audiences (Richardson 2008). In Chapter 2, I discussed the role of rhetorical devices used in language in disseminating dominant ideologies. Rhetorical or figurative language is traditionally distinguished from everyday non-literary language, but in the Cultural Studies framework, texts are located within a cultural circuit which links texts to various moments including that of the everyday lived experience.

Rhetorical devices often used in texts include: metaphors, which apply a phrase to an object when the phrase is not literally applicable to the object, for example, (Sue Grant-Marshall, ‘Planting seeds of growth’, *City Press*, February 21, 2016); assonance, whereby two closely positioned phrases with vowels repeat the same sound for example, “keep the sea clean”; superlatives, refers to the use of adjectives to emphasises certain objects, places or things that have extraordinary attributes, for example, “this is the best solution to the crisis”. Attention to these words as signifiers involves micro level textual analysis. It then needs to be applied in conjunction with a macro level analysis. In my analysis I make reference to certain rhetorical devices and their functioning.

ii. Macro textual analysis

a. Narrative analysis

Like language, narratives have an illusory relationship to the real. Meaning in narratives is thus found in its universality and in its relationship to other narratives (intertextuality) (Fiske 1987). News texts do not only report on events but tell stories (Bell 1991). As such, news narratives are both a reflection and a product of the cultural values of society (Richardson 2006). Narrative theory is thus useful for identifying the how the current drought disaster has been narrativized in the *City Press*’s coverage. News texts differ from traditional narrative structures in certain aspects as they tend to focus on events that are currently unfolding without a definitive conclusion. Additionally, events in news texts are typically structured to present the most pertinent information earliest in the text. The ‘inverted pyramid’²³ structure is often used. In this study, I employ a structuralist approach to narrative analysis as this provides insight into the commonality among narratives and their relationships with each other. Two structuralist approaches to narrative analysis includes analyses on the syntagmatic and paradigmatic dimensions. Analysing narratives by

²³The inverted pyramid comprises a lead which summarises the ‘5 W’s and H: *who, what, where, when, why* and *how*.

incorporating both dimensions allows for a more thorough and critical analysis as understanding the structure of the text allows one to further consider the position of the text in relation to other texts and is thus the approach adopted in this study. The syntagmatic approaches informed by narrative theorists Propp and Todorov, is concerned with the surface structure of a narrative, while the paradigmatic approach informed by Levi-Strauss is concerned with underlying structural meaning.

In the syntagmatic dimension of narrative, attention to meaning is made through the causality of events as consequence is created out of sequence (Fiske 1987). In this approach, narratives omit random events and the plot only includes those elements of the story necessary to moving the story forward. The chain of cause and effect is not necessarily presented chronologically so long as all the relevant events are included, implied or referred to. This is typical to news reporting structures which tend to adopt the inverted pyramid or champagne glass structure²⁴ (Prinsloo 2009). Propp's focus on form describes the events that make up narratives. Furthermore, Propp suggests that there are eight character-types that can feature in narratives, namely, the hero, villain, dispatcher, helper, princess (or the prize), the father of the princess, the donor and a false hero. The hero of a narrative is either a seeker-hero or a victim-hero. In a seeker-hero narrative, a hero has a quest with an objective and may struggle with a villain, while in a 'victim-hero' narrative, a hero seeks to transform their current situation. The villain in narratives serves to antagonise the hero. The family of the hero describes the not only a real family, but a metaphorical one that includes characters for whom the hero feels a responsibility.

Propp describes 32 narrative functions arranged in a sequence, each consisting of an action describing how it contributes to the development of the overarching narrative. Narratives do not feature all 32 functions. Two acts can function in the same way, and some functions can be used more than once to reinforce an action. Propp further describes four laws of functions: functions remain stable as they are the fundamental elements of the narrative; there is a limited number of functions; the sequence of events is always identical, and narratives share a common structure (Prinsloo 2009). Additionally, the 'magical agent' allows the hero to transform to a new state and achieve a goal (Prinsloo 2009).

On the other hand, Todorov's syntagmatic model focuses on the social rather than

²⁴The Champaign glass structure begins with a lead that includes the most pertinent information of the story. The middle is divided into two sections, the first of which provides a descriptive analysis of the story. The second section includes the events occurring in the story in chorological order. The structure ends with a conventional conclusion.

the individual and is concerned with “exploration within the social [and] the opposing forces of stability and disruption” (Fiske 1987). Todorov’s model functions on two levels: “a state of being which is either stable or unstable” and “a causal transformation from one state of being to another” (Prinsloo 2009: 220). This approach is centred on the principles of causality (every event has an effect which is in turn, a cause with an effect), and transformation (disruptions are solved by the movement through a chain of events). Through cause and effect, narrative is transformed through five stages, namely, a state of equilibrium at the beginning; a disruption of the equilibrium by some action; a recognition of that disruption; an attempt to rectify the disruption and, finally, a new equilibrium (Prinsloo 2009). In the initial stage, there is a fleeting order and balance which is disturbed by an event which propels the hero into action. To reinstall the equilibrium, there must be a recognition of the disruption and further action to confront the disorder. By the end of the narrative, the equilibrium is typically reinstalled, although it is enhanced and is not a replication of the initial state but changed in some way. The discursive or ideological position of a narrative is defined by what the text anticipates the state of re-equilibrium to be. Because the hero of the narrative is identified as whomever takes action, identifying the hero establishes the discursive position of the text.

While syntagmatic approaches are concerned with narrative sequences, the paradigmatic approach is concerned with analysing patterns outside of internal relationships, as what is omitted is as meaningful as what is included (Chandler 2018). Levi-Strauss’s approach focuses on the deep structure that provides an understanding of the contradictions prevalent in society and the symbolic negotiation of these contradictions. This deeper structure shifts the structuralist approach from syntagmatic to paradigmatic. The paradigmatic dimension is concerned with deeper meaning of content beyond form and attempts to uncover the underlying patterns of a narrative (Prinsloo 2009). Levi-Strauss’s approach considers the dynamic process of constructing meaning rather than only considering narrative as a reflection of society. This approach removes narrative elements from their structure to analyse binary oppositions to illustrate their similarities and differences in order to identify meanings. Binary oppositions are underlying generalisations that highlight tensions existing within contradictions in society. Levi-Strauss’s theory is useful in the analysis of news texts as the binary oppositions illustrate how the positioning of characters relates to the social context and how it has been rearticulated over time.

b. Rhetorical Analysis

News texts employ figurative language to persuade audiences and can thus be considered a discursive genre, as discussed earlier. To persuade audiences, various selections and exclusions are made and ideas organised in a particular way during the construction of texts (Richardson 2008). Particular discourses within texts employ rhetoric to achieve and maintain dominance and rhetoric is thus vital to power dynamics. Rhetoric involves both classification - the logical organisation of ideas, and argumentation - and the propositions asserted to persuade audiences of a claim (Prinsloo 2009).

Argumentation seeks to reason with a rational judge/listener with the intention of altering their position (van Eemeren et al. 1996). The position of the listener can be altered using emotional, logical or ethical reasoning and by employing different rhetorical strategies. Emotional, logical or ethical reasoning comprises Aristotle's three modes of persuasion. Ethotic arguments appeal to the personal character of a speaker, particularly when a speaker has first-hand experience and is credible and is useful when both sides of argument presented are convincing. News journalism often uses the opinion of 'expert' authorities as sources, thus making ethotic arguments. This is evident in the sample text, 'We must act now to turn this drought crisis around' (Appendix 4). Pathotic arguments seek to induce a particular mind-set of listeners by appealing to the emotion of audiences. This is evident in the tendency of the press to address extreme weather events from a human-interest perspective. The article, "*SA drought: Up-and-coming farmer takes a blow*" (Tau 2015) is evidence of this. The article is a news piece which describes the impact the drought has had on one farmer in particular. Human-centred reporting tends to privilege the elite members of society. Evidently, the farmer, Mosalahuping Kgomo discussed in the above example is named as a former councillor at the Ngaka Modiri Municipality. To make this pathetic argument, the article uses a poetic tone and provides the farmer's personal perspective, rather than just providing a quantifiable fiscal description of his loss (Tau 2015):

The last harvest was good and I even sold 130 tons of maize to the World Food Programme, which is something I am proud of, knowing I contributed to Africa's food security. I have become a successful farmer through hard work, dedication and not relying on grants and hand-outs – and I am determined to continue doing this as a sustainable business (Kgomo in Tau 2015)

Logetic arguments are rational and provide evidence to assert its position. Logetic

arguments can be either deductive or inductive. Deductive arguments are “assertions made through a series of statements from which a valid conclusion is reached” (Prinsloo 2009: 147). If the premises of a deductive argument are true, the conclusion will be true. Inductive arguments are based on plausibility and relate the argument to a greater context. Inductive arguments are further characterised as symptomatic, analogies or causal relationship. Symptomatic arguments generalise an individual example and apply it to a whole. Analogies are a comparison of arguments. Arguments can further assume a causal relationship between statements (Prinsloo 2009, Richardson 2008).

In addition, the three divisions of argumentation are useful to this study and include forensic, epideictic and deliberative arguments (Richardson 2008). Forensic arguments focus on past actions and tend to use accusations or defence to invoke justice or highlight injustices, using proof or examination of evidence (Prinsloo 2009; Richardson 2008). Epideictic arguments are demonstrative and focus on the character of the speaker, using praise or censure to credit or discredit the speaker. Deliberative arguments focus on future actions and aim to induct or dissuade listeners to adopt a particular opinion by providing a discussion of potential advantages and disadvantages.

c. Modes of Operation of Ideology

Thompson's (1990: 56) critical conception of ideology proposes that symbolic phenomena are only meaningful to the extent that they “establish and sustain relations of domination”. To understand how relations of dominations are maintained through the articulation of symbolic forms, Thompson (1990) identified five modes of operations of ideology. He does, however, caution that the operation of ideology is not necessarily confined to the modes he identified; he further recognises that multiple modes may apply in any instance and these can reinforce each other. He goes further to identify strategies that are typically associated with them and further enable the construction of meaning (Thompson 1990). Strategies can serve any of the modes of operation and are not in themselves ideological but become ideological when used in the service of power (Thompson 1990). These modes include legitimisation, dissimulation, unification, fragmentation and reification.

Legitimisation relates to how relations of power are established and maintained, and the strategies Thompson identified as effecting legitimisation include rationalisation, universalisation and narrativisation. Rationalisation (arguing) refers to how symbolic forms can rationalise or justify existing social relations. News texts often use rationalisation as

rhetoric requires a rational judge to persuade. Universalisation describes how ideas are organised to serve the interests of a few, by appearing to serve the interests of all. The use of discourses to relate the past creates a sense of community and belonging which appears to transcend difference and is referred to as narrativisation (Thompson 1990). The second mode, dissimulation, works to reinforce power relations through concealment and three strategies associated with it are displacement, euphemisation and trope. Displacement works by using a term associated with a particular object or individual to describe another object or individual. Euphemisation refers to the aligning of powerful interests with positive connotations. Trope is the use of figurative language, including assonance and metaphor (see rhetorical tropes). Thirdly, unification seeks to invoke unity amongst individuals in a collective identity disregarding difference by employing standardisation and symbolisation of unity as strategies. Standardisation refers to the creation of a unified identity by invoking a sense of sameness, while symbolisation of unity is the construction of a unified identity using symbols that come to identify the group (Thompson 1990). Fragmentation, the fourth mode contrasts with unification; it strategically differentiates between actors often to challenge collective power. By expurgating the other, fragmentation constructs an enemy against which individuals can unite to overpower (Thompson 1990). Finally, reification operates to make a state of affairs appear natural - as though it was always the case. Its strategies include naturalisation, eternalisation and nominalisation. Naturalisation describes how social relations are made to seem as natural historical conditions. Eternalisation refers to how social relations are portrayed as having always been a particular way, while nominalisation turns actions and participants of actions into nouns (Thompson 1990). Through these modes, hegemonic ideologies maintain dominance and continue to subordinate sustainable environmental and climate action discourse. This is seen in denialist discourses which suggest that climate change is an eternal and natural process, unrelated to industry. An article published by the *City Press* (sama Yende 2015b) argues that drought is necessary in nature reserves to regulate animal populations, allowing weaker animals to be killed off while stronger animals can survive, but it also omits any indication that the current drought is occurring under aggravated conditions. Although this “survival of the fittest” may be true of natural drought conditions, in an article describing the “drought [that] wreaks havoc” (sama Yende 2015b), it undermines the urgency of the issue.

CHAPTER 4 - ANALYSIS

It is strongly argued that in order to prevent the escalation of climate change and consequent extreme weather conditions (for example, drought), resistance to the industrial activities that underpin the neoliberal economic order that results in global warming is vital (Klein 2014; Movement Generation n.d.; Miller & Dinan 2015; Martinez-Alier 1997). Resistance to neoliberal practices requires public participation and access to critical information about the underlying causes of weather conditions. The framing of the drought in news media is thus highly significant to the formation of public opinion about climate action. As news media are considered to address issues of consequence, it is appropriate to interrogate these representations and their implications for public participation and political action. This chapter thus provides insight into how drought is framed in news coverage by the *City Press*. Here, I present my analysis of five *City Press* articles, informed by the research procedure and range of methods used discussed in Chapter 3 and aim to answer the research question posed. I begin this chapter with an analysis of the first sample text relating to the drought.

4.1. The high cost of SA's worst drought 23 years (Appendix 1)

They [farmers] cannot repay their production loans, and worst of all, are going to battle to secure financing for the new season as their creditworthiness has been severely affected. We do not have a figure, but any farmers are at risk [of losing their farms] ([Agbiz CEO Purchase] in sama Yende & staff reporter 2016 par. 21).

The 24-paragraph article categorised as news, written by Sizwe sama Yende and *City Press* staff reporter, ('The high cost of SA's worst drought 23 years', *City Press*, July 8, 2015 (Appendix 1)) addresses the drought from within a neoliberal economic discourse and focuses on the theme of the production of food as it recurs in other news reports. As a news text, it is anticipated that crucial information about current events would be provided and stated in its introduction. The headline (The high cost of SA's worst drought 23 years) and subtitle of the text (SA's worst water shortages in 23 years have caused a decline in farming output that will lower its GDP and cause food-price increases), frames the drought as a hazard to farming output that further disrupts the typical functioning of the economy. A synopsis of the article is presented and followed by a close critical reading.

The conventional news-writing technique of including the 'five W's and H' in the introduction is applied in paragraph 1 and 2 and condenses the main points of the article. The

underlying theme, namely that the economic impact of the drought will “cause the country’s farmers to lose up to R10 billion [in 2015]” is established in paragraph 1. The drought is then established as an ongoing crisis which has affected particular provinces and crops more severely than others (par. 2). Quotations from the United Nations (UN) and corporate enterprises which provide figures to further quantify the cost of the drought is presented in paragraphs 3 to 12. Then, the impact of the drought on “emerging farmers” is discussed and endorsed through quotations from the operations director of TechnoServe (par. 12-16). Paragraph 17 describes the impact of the drought on the South African economy (“[l]arge companies” will have to import goods) and is followed by an account of the GDP (par. 18 and 19). The text then returns to the plight of emerging farmers once again (paragraphs 20 to 24) but frames it this time by corporate entity Agbiz’s CEO. The article concludes with the assertion that the full extent of the crisis will only be seen in the following year (2016) and a statement by Absa’s agribusiness head, “Next year is the one to watch stringently. When farmers have diversity, they don’t have trouble, … We are, however, comfortable, because it is a small area that is affected when we look at our books.”

This analysis begins at the macro level (Richardson 2008) by considering the arguments that legitimate a neoliberal discourse and support the overarching narrative which constructs drought as a disruption of the norm. I thus begin this analysis by describing the discursive strategies used in the text that contribute to the framing of drought in terms of neoliberal discourse. Through procedures of selection and exclusion, the interests of the economy and the capitalist agenda are privileged while the voices and responses of the affected farmers are entirely omitted from the text. The six sources cited in the text include economic development programs, Grain SA and TechnoServe²⁵; an intergovernmental organization, the UN; a non-profit independent research program, SPII; and corporate enterprises, Absa agribusiness and Agbiz. Of the six sources included, four sources are non-profit organizations that espouse the ideas and concepts underpinning sustainable development²⁶ that presume that capitalist practices can provide solutions to crises caused by capitalism (as discussed in Chapter 1). Sustainable development program, TechnoServe,

²⁵TechnoServe (2018) is a non-profit organization that seeks to build industries and enterprise in ‘developing’ countries. Its aims are to develop businesses and individuals, promote networking and improve business (<http://www.technoserve.org>).

²⁶The SPII (2018) is a research think tank that partners with democratic institutions. Its aims are to promote sustainable development through researching as sharing information about poverty and inequality from within the framework of sustainable development (<https://spi.org.za/>).

is quoted to describe the difficulties faced by farmers, yet representatives of farming enterprises themselves, large or small scale, do not speak. The remaining two sources that are included are corporate enterprises (Absa agribusiness and Agbiz), although the banks in the agricultural sector have not experienced losses as substantial as farmers have. This is evident from the concluding sentence in the article which references a discussion regarding the farmers inability to repay loans and debt: “We [Absa agribusiness] are, however, comfortable, because it is a small area that is affected when we look at our books” (par. 24). In this way, the dominant neoliberal mechanisms of the economy are normalised while farming output is packaged as a commodity. The exclusion of non-elite voices results in a singular discourse that produces its ‘truth’ within a neoliberal economic frame. The inclusion and dominance of elite sources that is evident here is reflexive of the discursive practices of the journalism regime that sets the agenda for public discussion as well as frames the narrative of news events. In this way, discursive restrictions limit who may speak on the issue of drought.

Next, I describe how the text has been constructed as a news ‘story’ and narrativised the drought. By alluding to the fact that this is “the worst water shortage in 23 years”, the devastation caused by the disaster is constructed as the whole story, that is, as a singular event, rather than a growing, persisting series of disasters. In the narrative of the drought, the existing state of equilibrium (Todorov’s first stage of narrative) relates to the successful production of maize and other crops as vital agricultural commodities in South Africa. Farmers irrigate these crops, banks insure farming enterprises and the export and consumption of crops contributes to the economy. This equilibrium is disrupted by drought conditions and the consequent severe lack of rainfall. The disruption introduces a set of binary oppositions relating to drought in contrast to a state of plenitude where things are not devastated, and havoc does not reign (Table 2). The binary oppositions position the drought as a source of devastation that “causes” a loss of productivity and profit. This depicts an ideal state where agriculture is productive as harvests are fruitful and benefit from average rainfall conditions. In this state, farmers make a profit and business continues as usual, unperturbed by disruptions to the weather. The drought is the antithesis of this as it causes devastation and crops do not grow (Table 2). Farmers amidst a drought are at risk and battle financially. The disruption is recognised by various structures that function within the capitalist mode of economy: banks recognise the disruption which is made evident by decreased farming output, a lowered GDP and rising food prices. Action is taken (in this account) by the banks

who attempt to mitigate the disruption by providing economic insight and giving financial advice to farmers to “make arrangements to carry over their debts”. Like most news articles, a new equilibrium is not reached, as “the full extent of the problem will only be seen next year” (par. 23).

Average rainfall (unaffected by drought)	Drought (existing equilibrium)
Productive	“devastating”
producing a harvest	“causing” [a loss]
had been benefiting	“had been hitting” South Africa
had already increased	had already “diminished” productivity
farmers during productive season	farmers during drought
make profit	“lose” financially
grow crops	not growing crops
can profit from	has had to “write off”
continue unperturbed	are going to “battle”
is safe	at “risk”
business as usual	would “need to make arrangements”

Table 2: Binary oppositions of the drought and of farmers in Text 1

The character’s roles in the narrative can be identified with reference to Propp’s character functions (see Chapter 3) and are further made explicit by undertaking a transitivity analysis. Although the farmers are constituted as losing financially, not growing crops and battling the drought, they are positioned as those who need to be saved, the banks are positioned as the seeker-heroes (in the Proppian terms discussed in Chapter 3) as their quest is to ‘save’ the farmers by ensuring that the farming enterprises from whom financial institutions profit remains solvent. Consequently, the banks make the false claim that they can make the farmers safe and profitable.

A transitivity analysis reveals that the processes attributed to the banks are verbal (they are constituted as authoritative for they “warned” the farmers and “indicated” facts and figures) as well as material as they “assist” struggling farmers. The drought is constructed as the villain and active, aggressive material processes are attributed to it as an agent with “devastating” consequences, “causing farmers to lose”, “diminishing” the economy (GDP) and as having been “hitting” farmers (the present continuous tense suggesting that the hitting

is a continuing process). What would otherwise be constructed as a lack or a disruption is thus anthropomorphised and given agency. Consequently, the drought metaphorically becomes an army which lays waste to everything in its path. In contrast to this aggressive oppositional stance, farmers are constituted as vulnerable, lacking agency and needing to be rescued by the institutions. Because of the drought, farmers “lose”, have “had to write off” and “are going to battle”. Additionally, they “are at risk”. The bank’s representative asserts that farmers “would need to make arrangements”, which acts as a euphemism for farmers needing to extend loans and go deeper in debt in the hopes of ensuring their survival.

The narrative articulated by the corporations as the voice of reason in a time of crisis is legitimised (Thompson 1990). The neoliberal economic mode that is privileged here is validated through the assumption of the universality and inevitability of the growth-driven economy. The discourse that constitutes large-scale mono-crop farming (of maize in particular), is naturalised as crucial to South Africa’s economy. Insufficient maize production is cited as a major consequence of the drought as there has been “a very heavy effect on the maize crop” in rain-fed areas (par. 14). Maize production has “incurred major losses”, “is the worst in eight years” and “is down from 1.25 million tons”. The consequences are then stated as severe because “the country would have barely enough white maize for its own consumption and would need to import about 700 000 tons of yellow maize to feed livestock” (par 7). The inflated price of maize is further discussed in paragraphs 2 and 8. It is assumed that maize is ‘natural’ to South Africa despite climate conditions not consistently supporting its production. This argument legitimates maize production as a major economic industry despite the bulk of the country’s water supply irrigating crops that are internationally regarded as rain-fed in order to fulfil commercial needs, thereby worsening the water scarcity in the region. The industrialisation of food production as a whole is further naturalised as the consumer-driven economy necessitates importing goods, adversely contributing to climate change. Rather than not consuming tomato-based products during the drought period, “[l]arge companies” import tomatoes.

The neoliberal economic mode is further endorsed through unification in that it discursively unites the narrative’s actors in the struggle against the drought (which is given agency). Unification works to incorporate actors affected by the drought in the narrative while making no reference to climate change and how climate change is linked to the food production industry. Although banks, commercial farmers, emerging farmers and consumers are not affected equally by the drought (par. 24), these actors are constructed as part of the

same family. The article positions the banks as helpers of a vulnerable industry, not as the beneficiaries of the financial success of agricultural enterprises. Food production is further discussed as a financial metaphor, as Nkomo asserts that he “know[s] one farmer who has had to *write off* his entire crop” (my emphasis) (par. 14), employing an accounting term to describe a decrease in the value of earnings.

To argue the neoliberal discourse embedded in the article, the pathotic mode of persuasion and various rhetorical strategies are employed. To appeal to the audience, the farmers are positioned as victims who have been harmed by the drought and reminds readers of the potential costs to ordinary citizens. Rhetorical strategies argue for the framing of the drought as seeking to devastate the farmers and the economy. A forensic argument blames the drought as an anthropomorphised agent (discussed earlier) for the worst water shortages in 23 years. Based on the historical evidence that extreme drought conditions are unlikely to occur more frequently than every 23 years, the drought is constructed as a villain seeking to do harm. This forensic argument highlights the injustice done to the farmers. Furthermore, an epideictic argument is made in relation to neoliberal institutions by esteeming them as credible. The writers thus argue the significance of the drought to readers by invoking the assumed trustworthiness of corporate actors and thereby the powerful elite. However, the overall argument of the text is deliberative, focussing on the appropriate actions that farmers should take in the future. That is, the text argues that the country will need to “make arrangements” for the water shortages as well as import maize to sustain typical functioning. Furthermore, these arrangements are constructed by neoliberal institutions and disseminated to the public as a ‘credible’ source. The text articulates and therefore validates a discourse that constitutes drought in monetary terms and views damage primarily in terms of the country’s GDP and consequently the cost of living.

The text thus frames the drought as an aggressive agent seeking to damage the economy and omits the theme of drought as a natural hazard that is being aggravated by climate change and industrial and economic practices. The discursive strategies of privileging and omitting voices works to articulate the dominant neoliberal discourse that serves the interests of the power-elite. The economic discourse acts in the interest of neoliberal economic order which is legitimated and naturalised here. Rhetorical strategies and modes of persuasion are employed to argue that the drought has devastating effects on agriculture, an issue which is of concern to *City Press* readers. Assigning agency to the drought simplifies the issue that drought is a natural hazard that is aggravated by human

activity which intensifies its impact and frequency. Moreover, emphasising that drought conditions are beyond human control normalises an agricultural industry that is not designed to suit the drought-prone, semi-arid region yet is continued, arguably for its contributions to the economy (to which employment is a factor), overlooking the precariousness of mono-crop industries and the reliance of drought-vulnerable crops. The text further omits concerns about the impact of food production, mass farming and international transportation on aggravating the intensity and frequency of drought conditions. The text fails to link the drought and climate change to the mode of the economy that emits greenhouse gases, contributing significantly to the increasing carbon footprint. I now move on to discuss a second text relating to the drought.

4.2. Drought: As farmers wait for Gordhan, Agri SA warns of job losses, influx of migrants (Appendix 2)

The drought is clearly a national disaster, so it is important that South Africa makes available all possible resources (Essop 2016 (par. 1).

The 20-paragraph text categorised in the *City Press*'s news section, (Philda Essop, 'Drought: As farmers wait for Gordhan, Agri SA warns of job losses, influx of migrants', *City Press*, February 22, 2016) reports on a proposal presented by non-profit agricultural industrial organisation, Agri SA. The proposal was issued to the then Minister of Finance Pravin Gordhan, President Jacob Zuma and the Minister of Agriculture, Forestry and Fisheries preceding the delivery of Gordhan's budget speech. The report takes its information from this proposal primarily and does not go beyond naming agribusiness companies as sources. Clearly, the framing of the drought crisis is shaped by powerful bodies with adequate resources to hold press conferences and distribute press releases.

The article begins with the assertion that the ongoing drought should be declared a national disaster in order to allow all possible resources of South Africa to be made accessible for disaster relief (par. 1 and 2). The article introduces what is argued to be a major consequence of the drought, namely potential migration from southern African countries also adversely affected (par. 3). To mitigate the consequences of the drought, AgriSA have presented a plan to government and held discussions with various government stakeholders (the president, Minister of Finance and the Minister of Agriculture, Forestry and Fisheries) prior to the delivery of the budget speech (par. 4 and 5). The article estimates that a significant amount of grain will need to be imported (par. 6). It also notes that five provinces have been

declared disaster areas with livestock crises and food price inflation (par. 7-10). Significantly, the potential migration of Zimbabweans to South Africa is flagged as a concern (par. 11 and 12), as are resulting job losses in the industry (par. 13 and 14). Paragraphs 15 to 20 introduce AgriSA's proposed plan relating to assisting farmers. Finally, AgriSA are reported to assert that they will approach the commercial banking sector for relief if the state does not declare the drought a disaster and make resources available.

The headline (Drought: As farmers wait for Gordhan, AgriSA warns of job losses, influx of migrants) and first paragraph serve as an abstract of the article. The colon²⁷ in the headline constructs the article as a follow-up of the coverage of the drought crisis. Furthermore, a definite article is used to reference "*the* drought" (par. 1) implying it was already known. Interestingly, in this narrative of the drought, AgriSA are constituted as seeker-heroes who act to rectify a disruption while farmers are positioned as passive actors from the start who merely wait, and migrants flood the country.

The narrative positioning AgriSA as heroes is analysed here using Todorov's narrative model and Propp's narrative and character functions. The state of equilibrium (Todorov's first stage of narrative) refers to the situation where commercial farmers employ workers and there is relative job security. This is disrupted (stage 2) by the drought affecting southern Africa and the resulting livestock crisis and food price inflation. The drought is represented as a lack that is "clearly a disaster" and is recognisable (stage 3) by the increasing food prices in the meat industry. Here, it is AgriSA that presents itself as recognising this lack and acting on it, thus taking up the role of hero. Acknowledging the disruptions caused by the lack, AgriSA acts (stage 4) by proposing a plan for government that will protect farming enterprises and restore the profitability of agribusiness. A state of re-equilibrium (stage 5) is not reached, but a second plan to reach a desired equilibrium if the first fails is outlined: "if the money was not made available from the state treasury, AgriSA would approach the Industrial Development Corporation, the Land Bank and commercial banks and potential international donors" (par. 20).

While the text is categorised as a news article rather than as a business story, it cites corporate sources exclusively. The only sources included in the text are representatives of three corporate entities:²⁸ AgriSA's chief executive, Omri van Zyl; AgriSA's president,

²⁷A colon in the headline of online articles allows the key topic to be easily identified through Search Engine Optimisation which links online articles with keywords constituted in the heading.

²⁸Although a non-governmental organization, AgriSA "is a member of high-level business, trade and

Johannes Möller and president of the Agricultural Business Chamber, Schalk Pienaar. The chief executive of AgriSA is the single source cited in paragraphs 1 to 15. AgriSA's president is cited in paragraphs 19 to 20, and Agricultural Business Chamber in paragraphs 16 to 18. These actors are thereby constituted as experts on drought and are given responsibility for coordinating drought relief for the agricultural industry. These sources are thus legitimised and attributed with the authority to produce 'truth'. The 'truth' about the drought from the perspective of the agricultural industry is thus naturalised as the overarching 'truth' about the drought. Potential alternative or contesting discourses are thus obscured as only primary validators speak in the text (Tomaselli, Tomaselli & Muller 1987). Dissimulation works to maintain power relations by positioning the interests of the banks as the same as the interests of farmers and farmworkers while omitting a discussion about AgriSA's direct interests in the profitability of the farmers in the industry. In this way, discourses are shielded (Tomaselli, Tomaselli & Muller 1987) and the elite voices of agribusiness is prioritised to avoid contesting discourses from emerging.

The authority bestowed upon AgriSA becomes more explicit through a transitivity analysis of how the actors are positioned from the start, as the headline indicates. There are three sets of characters in the narrative of the drought in this construction, namely, the heroes AgriSA, the farmers (who wait for response) and the government. AgriSA "warns" the public of job losses. Such verbal processes assert AgriSA's authority. The authority given to AgriSA in the headline is reiterated within the text as AgriSA are attributed with verbal processes ("*told*", "*said*"), mental processes ("*believed*" and "*was concerned*" about jobs) and material ones ("*would approach*" commercial banks). It is notable that the headline positions the farmers as passive for they "*wait*" for the political elite to act. In the body of the text, the farmers are represented through existential processes: they "*were experiencing*" a crisis and "*needed*" relief). Even when they are material processes, the nature of the action is simply reactive and seeks to mitigate the impacts ("*had begun reducing*" their produce). Although migrants are not actors in this narrative but a consequence of drought, they are constructed as a homogenous, passive mob that "*influx*" into the country - an aggressive and powerful material process. The specificity and precision of their actions is removed, thereby pacifying them (see Chapter 3).

²⁸Agricultural entities including Business Unity South Africa (BUSA) [and] the International Chamber of Commerce (ICC)" (AgriSA 2018)

The authority given to AgriSA thus places it in a position to perpetuate discourses that work to fragment society. Clearly, van Zyl acknowledges that the drought is affecting southern Africa, not just South Africa (par. 3), yet the potential “influx of migrants” into South Africa is of particular concern in his eyes. This fragmentation through the expurgation of the other (discussed in Chapter 3) rehearses a xenophobic²⁹ discourse that constitutes migrants as other, creating economic instability and instilling fear into the presumed readers that insecurity in the agricultural sector will result in foreigners taking jobs. This also triggers the fear of crime and social instability. This argument is frequently deployed by and is consistent with nationalist capitalist discourse - in contrast to an anti-capitalist discourse that might unite African countries in a struggle against an economic order that adversely affects the continent.

Because the article relies on AgriSA’s proposal for content, van Zyl’s voice is privileged. Van Zyl positions migration as a significant consequence of the drought, second only to job losses as constituted in the headline, “Drought: As farmers wait for Gordhan, Agri SA warns of job losses, *influx of migrants*” (emphasis added). To combat the issue, van Zyl asserts that “all possible resources” should be made available to mitigate the drought’s impact. Van Zyl moves to assert that “[t]here are currently 2.5 million hungry people in Zimbabwe [and that] you can just ask yourself where they were going,” rhetorically implying that the hungry Zimbabweans will come to South Africa to feed themselves. His argument is twofold: first by making funds available to support commercial agriculture, enterprise can continue to employ South African farmworkers, and secondly, employment for South African workers must be defended with “all possible resources” including military intervention as the infrastructure available to the South African Police Service (SAPS) and the South African Defence Force (SANDF) can be utilised to exert control over migrant populations in disaster scenarios.

Fragmentation is inherent in van Zyl’s argument and further works to differentiate the farming sector by class. Although AgriSA argues that the agricultural sector needs to be bailed out because of the harsh drought conditions, Pienaar argues that the state guarantees advocated for by the Agricultural Business Chamber should apply “not for all farmers, but where farmers have a chance of recovery” (par. 17). Implicitly, it is not all farming

²⁹Migration from southern Africa had been occurring in northern South Africa in the years preceding the drought. Many migrants have suffered poor labour conditions and “thousands of Zimbabweans who fled economic meltdown in their country [were] mistreated on farms in northern South Africa” (Khumalo 2016

enterprises whose success is advocated for by AgriSA and agricultural corporations, but the interest of the commercial farmers whose potential income would be sufficient to maintain the agricultural economy. According to the proposed plan, the communities that are likely to survive disasters are larger- scale enterprises and those with significant capital who are better equipped to absorb economic shocks and are protected by neoliberal development programs such as AgriSA, as discussed in Chapter 1. In contrast, subsistence and emerging farmers (the majority of whom are black) are less likely to recover. The consequence of existing unequal social relations is maintained as it is advocated that those with capital, should receive financial and other support while those with less capital should not, the consequence of which would be to consolidate existing unequal social relations. Moreover, the interests of the few - AgriSA and agricultural banks - is presented as serving the interests of South Africa, effectively universalising (Thompson 1990) them as though they have the same concerns, rather than acknowledging their positioning as corporate enterprises focused on the bottom line. Consequently, any concern relating to subsistence farmers is omitted.

Additionally, van Zyl asserts that AgriSA “would approach commercial banks” if funding from the government was not made available. This presupposes a particular obligation on the state to make the money available which is made more explicit by considering the modalities of their statement. As indicated by instances of obligation modality, the actions that the farmers should take to avoid future events, such as migration and retrenchment is suggested. South Africa “*would*” have to import grain and “*would*” see migration from neighbouring countries and the state “*would*” need to make funds available. To ensure future prosperity, AgriSA argues that the government should make funds available to implement its disaster plan. Furthermore, Essop makes a very strong truth statement that the drought crisis is “clearly a national disaster” while van Zyl’s concern regarding potential unemployment in the sector is certain. The severity of unemployment to the economy is made apparent as further retrenchment in the sector “*will* have a very serious situation”. Although it is uncertain whether migration will happen, it is presumed and foregrounded as a major concern resulting from the drought. The plight of the farm workers (unemployment) is certain, yet such concerns are second to that of potential migration. In this way, funding from government is framed as the only solution to the crisis rather than other possibilities, for example, potentially moving beyond mono-cropping (the agri-industry) to sustainable alternatives (agro-ecology, for example). Such alternatives would reduce the production of water-intensive genetically-modified crops and in turn, provide more stable employment in

the sector (for example, producing drought-resistant crops). Moreover, any discussion of agroecology is omitted from the discussion.

A rhetorical analysis makes this argument more apparent. By relying solely on banks as sources, the text accepts the neoliberal positioning that presumes the current economic mode as the only possible frame of understanding the perspective of the banks and thus presents this argument as the sole course of action in mitigating consequences of drought. This epideictic argument assumes the credibility of banks which facilitates the discourse of corporate institutions representing credible sources in journalistic practice, a norm that has become aligned with readers' expectations of news texts. The deductive logic here works thus: the drought is disastrous for the agricultural sector which supports the economy. Funding can be made available if the drought were to be declared a disaster so as to mitigate its impact on the economy. To substantiate this argument, the current challenges posed by the lack (unemployment and declining GDP) are made apparent as is the potential future risks (migration).

This text by Essop (Drought: As farmers wait for Gordhan, Agri SA warns of job losses, influx of migrants 2016) frames the issue of the drought as an economic problem that can be fixed by making more money available. The drought is positioned as an ongoing lack that is affecting farmers, yet the dire consequences for the farmers is largely omitted from the text. The plight of the commercial farmers is expressed in figures and percentages by agricultural banks who profit from stable farming conditions and are weakened by drought conditions as farmers cannot repay loans. Nevertheless, the banks' position in terms of the drought (and in turn their agenda) is not noted despite the banks being established as a key player in drought relief. By framing money as the answer to drought relief, the broader issue of climate change and the long-term sustainability of farming enterprises in a drought-stricken region is quite simply omitted and rendered invisible. Furthermore, the article works to fragment society in terms of those who are economically liable to survive the drought against those who lack capital to mitigate the drought's impact. This is done firstly, by warning readers about migrants without discussing what the implications for migrants will be, and secondly, by ensuring the sustainability of some farmers and not others. Although unemployment is cited as a severe consequence, the invocation of percentages and figures frames unemployment as an issue linked to the country's GDP, rather than a social issue with severe impacts that exacerbate the substandard living conditions of already impoverished communities. Any discussion about AgriSA and agricultural banks is omitted from the text,

yet their credibility is to be assumed from their inclusion and positioning within the text. The professional practice of ‘balance’ is not in play here, as no further sources are included. Moreover, agriculture is constructed as vital and inevitable to the South African economy, yet climate change which is projected to increasingly intensify extreme weather conditions in the region is omitted. The construction of the drought as a lack that can be filled with money constitutes a denial of the fact that drought and other extreme weather conditions are the consequences of climate change.

4.3. Weak La Niña a fillip for SA (Appendix 3)

The Bureau of Meteorology in Australia – known for its expertise in tracking El Niño and La Niña events – is forecasting a 50% likelihood of a La Niña event forming later this year (Brown 2016 par. 29).

The 29-paragraph news text by Justin Brown (2016) categorised under the *City Press*'s business section, provides an overview of the potential benefits that the predicted La Niña weather pattern could have on the South African economy. As a business news text, its primary focus is on how the La Niña phenomenon will affect the corporate sector and economy. The abstract formed by the headline ('Weak La Niña a fillip for SA' (Appendix 3) and the lead paragraph suggest that the La Niña will boost the economy. Here, three main points are highlighted: a weak La Niña event is emerging that will bring improved rainfall; this phenomenon is following the El Niño which "caused a devastating drought"; the economy will receive a multimillion-rand boost owing to the La Niña. The predicted La Niña is described as "weak" yet is still positioned as being a "fillip" for South Africa, an unusual expression used to describe the potential boost to the economy. The text thus frames the La Niña event as the antithesis to the ongoing El Niño pattern and argues that it will bring improved rainfall conditions to the drought-stricken region. A synopsis of the article is presented here and is followed by a close critical reading.

The forecasted La Niña phenomenon is anticipated to boost the South African economy by acting as an antithesis to the El Niño which "caused a devastating drought" (par.1). The La Niña phenomenon is simply described in two lines as the "reverse" of El Niño which is "associated with a warming of the central and eastern tropical Pacific" (par. 2). The report moves to discuss the potential consequences of a La Niña event which "could result in above-average rainfall" and presents a quotation from the Agricultural Business Chamber (ABC) which predicts that improved rainfall would "[replenish] soil moisture ... after harsh conditions that have resulted from the drought" (par. 4). Improved rainfall is argued to relieve drought-stricken industries linked to agriculture and is elaborated on in paragraphs 5 to 24 with a particular focus on "the local agricultural sector, agribusinesses and food companies, which will realise improved profit" (par. 6). A representative of the SA Cane Growers' Association, Richard Nicholson, asserts that "rainfall will be welcome" to the sugar cane industry in particular as it has been severely affected by the El Niño phenomenon (par. 22-24). Agricultural and agri-processing business, Tongaat Hulett which

grows sugar cane in South Africa, Zimbabwe and Mozambique, is reportedly “hoping for a wet summer” as a result of the emerging La Niña (par. 22). Weather forecasts from two official sources are then described in greater detail, particularly noting the uncertainties and likelihood of the La Niña occurring (par. 25-29). The text concludes by referring to the Bureau of Meteorology in Australia which is “known for its expertise in tracking El Niño and La Niña events” that asserts that there is a “50% likelihood” of the La Niña occurring (par. 29).

I begin this analysis at the macro level (Richardson 2008), focussing on the narrativization of the drought crisis which constructs the emerging La Niña weather condition as a phenomenon that will transform the condition of the economy. In terms of Todorov’s five stages of narrative, the initial state of equilibrium in this text is that the South African economy is sustained by the agricultural and food production industries. This equilibrium is disrupted by the El Niño pattern “which caused a devastating drought” in the region. The disruption caused by the El Niño is clearly recognised as South Africa has to import wheat (par. 10); female livestock have “contracted by 13%” (par.12); food companies are “under pressure” (par.19) and sugarcane production has declined (par. 23). Agricultural Business Chamber (ABC) attempts to counteract the disruption by monitoring weather forecasts and noting that a weak La Niña weather pattern is emerging. Industry stakeholders respond to the emerging pattern by “welcome[ing]” the drought and “hoping” it would bring above-average rainfall. It is implied that the desired re-equilibrium sees improved rainfall and in turn, improved economic conditions.

Applying Propp’s character functions enables El Niño to be identified as the villain that causes a disruption while rainfall is positioned as a magical agent that will alleviate the devastation caused by the El Niño. The La Niña event is thus constructed as a donor anticipated by the heroes to provide the magical agent, namely rain, that will assist the heroes in remedying the crisis. The agency of the characters in the text can be made explicit through a transitivity analysis of their actions. As the donor, the La Niña event is spoken of in active and material terms and is positioned as a helper that “is giving hope” and “will replenish” the country after the “devastating” lack “caused” by the El Niño. The El Niño is similarly constructed with active material processes but is positioned as the antithesis to the La Niña. In contrast to the magical agent that is rainfall, the drought which “hit [suppliers] hard’ is constructed as a lack that is induced by the El Niño (that has “caused a drought”). ABC is

attributed with verbal processes and granted authority as their statements are positioned as ‘truths’. South Africa and stakeholders in the agricultural and food production industry are positioned as passive actors who have actions done to them by the drought. South African farmers have “sustained losses” and have “been under pressure” but once the La Niña arrives they “will realise profits” (par. 6). Evidently, while the La Niña phenomenon is “welcome” it is presupposed that the El Niño had not been wanted. This is made clear by an analysis of binary oppositions described in Table 3 and Table 4.

La Niña	Binary oppositions (El Niño)
brings good rainfall	“caused” a devastating drought
gaining in strength	is “slowing down”
is “giving hope”	inciting desperation
“increases size of key agricultural crops”	diminishes size of agricultural crops
“will replenish” harvests	will destroy harvests
is “welcome”	is unwanted

Table 3: Binary oppositions of El Niño, La Niña

South Africa and industry stakeholders	Binary oppositions
“will realise profit” when La Niña emerges	running at a loss without rain
have been “under pressure” from El Niño	are operating normally without the El Niño
are “hoping” for relief from La Niña	have no hope for relief
“sustained losses” from El Niño	are making profit/sustaining

Table 4: Binary oppositions of South Africa and industry stakeholder

The La Niña is described as having a positive effect on the South African economy as it brings rainfall and counteracts the El Niño pattern which caused a drought (see Table 4). Consequently, the La Niña is welcomed by industry representatives who anticipate its replenishing effect on the drought-stricken country. In contrast, the El Niño caused devastation and desperation for South African industry stakeholders. This binary analysis depicts the El Niño as unwanted and preventing South African industry from realising a profit.

To argue that the La Niña will bring improved rainfall conditions and relief to the

drought crisis, various rhetorical strategies are employed in the text. I now move to discuss these strategies and the modes of persuasion that seek to convince readers that the La Niña will bring improved rainfall. After providing a brief account of the history of El Niño, the article makes a deliberative argument based on the predicted future outcomes of the La Niña pattern. It seeks to console readers that the drought “is slowing down” and will eventually be reversed by the La Niña phenomenon which will restore the equilibrium of the region. The positive discourse around transformation is the result of the shift from despair to relief that the drought is on its way. In this way, the urgency of the crisis is removed and the immediate call for public action is subdued. To further support the argument that the La Niña weather event is bringing relief to the drought, the epideictic argument validates the credibility of the meteorologists and weather services. This proposition is made after the SA Weather Service is quoted as saying “forecasts show a tendency of warmer-than-usual temperatures over the country” and the weather service having “marginal” confidence in forecast systems. The Bureau of Meteorology is noted has having “expertise” in “tracking” the El Niño and La Niña weather systems (par. 29) which justifies the position that the La Niña is emerging. The potential challenges to the predicted La Niña event is further argued although the likelihood of the La Niña occurring is only questioned at the end of the text, after having established the potential benefits of improved rainfall. Nevertheless, the certainty of whether the La Niña will occur is hedged using the modal verb, “*could*”. In contrast, assuming the La Niña occurs, the impact of the rainfall is described as a certainty and is predominantly discussed in terms of what it “*will do*”. In three instances, “*would*” is used to describe the impact of rainfall. The hedging of certainty regarding weather the La Niña will have a transformative effect is evident of the inadequate interpretation of scientific information by news media as discussed in Chapter 1. Because the journalists lack an in-depth understanding of climate science and weather patterns, the intuitive links between La Niña and its potential impact is omitted, as are the links between the La Niña being weaker than what is typically expected and climate change as a cause of this. Moreover, the potential of extreme flooding is understated. Disaster insurers view the prospective La Niña as bringing “an increase in extreme rainfall events with a very high risk of flooding. [They] also expect these floods will be severe enough to cause infrastructure damage” (Hugo 2016). Evidently, these intuitive links are necessary to frame the weak La Niña to climate change. Because the La Niña is framed in this way, the text fails to challenge business continuing as usual and serving the interests of capital.

Additionally, a pathetic mode of persuasion is employed to console readers that the La Niña will also “benefit “the ordinary consumer and those mired in poverty” (par. 8) (my emphasis). The unusual expression ‘*mired*’ means to be stuck in or covered in mud and is used to describe being involved or entangled in a situation that is difficult to get out of and emphasises the extent of the drought crisis on farmers and ordinary citizens.

The scope of the arguments presented in the text is limited by the news routine of privileging elite voices. Only major corporations are included as sources in the text. In paragraph 3, an economist from the ABC is cited as predicting the emerging La Niña event in lieu of a meteorologist. The text relies on the “expertise” of weather organisations yet foregrounds the ABC’s assertion that the La Niña is emerging, in paragraph 3. Any reference regarding ABC’s economic interests in the recovery of the agricultural sector is omitted from the text, yet their concerns are universalised as the same as that of farmworkers and South African citizens. Furthermore, the use of honorifics in the text is interesting as the titles of sources are only mentioned when economic. For example, ABC’s Wandile Sihlobo (the Head of Agribusiness research at ABC) is the primary source cited in this text, yet his title is not included in how he is named and referenced (“Wandile Sihlobo of ABC”) (emphasis added). In contrast, Schutte is named as “CEO” of Red Meat Producers Organisation; Nicholson is named as “economic research manager” of SA Cane Growers Association; and Staude is “CEO” of Tongaat Hulett. Corporate titles are thus deemed trustworthy and of public concern. There is a presumption of the trustworthiness of sources based on their corporate positioning and endorses neoliberal economic concepts, e.g. South Africa’s participation in the global economy is inevitable and eternal, consistent with the neoliberal discourse which validates these as elite. It is presumed that food companies must continue to manufacture regardless of weather conditions and are therefore “under pressure” as a result of the decline in production. Rather than producing products that are sustainable during a drought or consuming alternative products during drought conditions, food companies “had to import more foodstuff” which, incidentally, increases carbon emissions since transportation is a major contributor to carbon emissions.

In conclusion, a close reading of this text reveals that the La Niña phenomenon is constructed as a donor that will provide South Africans with a magical agent that will reverse the devastation caused by the El Niño. The explanation of complex weather patterns is oversimplified in the text, and the likelihood of the La Niña occurring is overstated as is its proposed intensity, despite being described as “weak” in the headline. In this way, the

urgency of the drought crisis is reduced, limiting further robust public opinion and action. The text is categorised as a business news text and this framing limits the discussion of complex weather patterns to their projected impact on economic industries. Moreover, a discussion about how these industries are risking exacerbating drought conditions is overlooked as is the sustainability of the various sectors in a drought-prone region aggravated by worsening climate conditions. Although the La Niña is described as weak in the headline of the text, (Weak La Niña a fillip for SA (Appendix 3)), the potential impact (and limits) of a “weak” La Niña in contrast to average La Niña conditions is not discussed. Furthermore, the estimated duration of the La Niña event is omitted. Considering that the drought is an ongoing crisis that is not forecasted to end with the emergence of the weak La Niña event, the text arguably lacks a discussion regarding how agribusiness can best utilise the forecasted rainfall and pre-empt returning dry conditions. The text presumes business continues as usual during extreme drought conditions and further constructs drought-vulnerable industries as inevitable to the functioning of the South African economy and in doing so, overstates the necessity of unstable industries central to extractive economies. Additionally, the text privileges elite members of society by adhering to journalistic norms that necessitate ‘balanced’ reporting (see Chapter 2). Although facilitative news media in a democracy is mandated to interpret information from the scientific community, a detailed or informative discussion about the La Niña or complex weather patterns is omitted, but the news value of ‘good news’ is overstated. Although Nicholson is quoted saying that extreme flooding³⁰ as a result of a La Niña event is possibility and “can be detrimental”, potential flooding as a result of the La Niña is not discussed further in this text, despite the likely possibility of severe flooding occurring (Hugo 2016). The potential consequences of the drought are limited as the adverse outcomes are overlooked.

³⁰In 2011, extreme flooding as a result of a La Niña event caused eight South African provinces to be declared disasters by government (Samuhel 2011).

4.4. We must act now to turn the drought crisis around (Appendix 4)

You would assume that, after repeated warnings over the past few years by industry stakeholders, we would have changed our attitudes, heeded the call to preserve water and perhaps have invested in future-proofing the water needs of the country (Matshekga 2017 par. 2).

In the 26-paragraph opinion piece ('We must act now to turn the drought crisis around', *City Press*, July 23, 2017) the Industrial Development Corporation (IDC)³¹ of South Africa's divisional executive for agroprocessing, industrial infrastructure and new industries, Lindiwe Matshekga, argues that we need to take immediate action in order to "turn the drought crisis around". The familial tone and use of personal pronoun in the headline (We must act now to turn the drought crisis around (emphasis added) (Appendix 4)) contributes to the framing of water scarcity as a problem largely instigated by urban residents' "clamour of entitlement" to water. Furthermore, the "drought crisis" is framed as a problem that can be solved by developing modern infrastructure. Here again, I present a synopsis of the article before providing a close reading of the text.

Matshekga begins by asserting that South Africa is undoubtedly "in the middle of a water crisis" (par. 1), a short statement with strong truth modality and an undisputed fact that frames the rest of the argument. She then remarks that the "repeated warnings over the years from industry stakeholders" ought to have been enough to change consumer attitudes regarding water yet attitudes have clearly not changed (par. 2-3). These consumer attitudes about water are then further described, specifically noting that consumers consider water to be a "free resource" that is "unlike electricity generation and supply" (par. 4) and that South Africans feel they should not have to pay tariffs for water although it requires infrastructure and capital (par. 7). These attitudes are argued to be quickly changing because of the current drought crisis (par. 9-11). The extent of the water-shortages in the Western Cape is then expounded on (par. 12 and 13) particularly that it "will require three consecutive years of above average rainfall to fully recover from this drought" (par. 13). Water-shedding is consequently a reality in the Western Cape and other parts of the country (par. 14-16). Matshekga notes that water tariffs and "drastic water shedding" is undoing the progress that has been made in the townships since democracy (par. 16). Water demand is positioned as a

³¹The IDC is mandated to "contribute to the creation of balanced, sustainable economic growth in South Africa and on the rest of the continent" by promoting "entrepreneurship through the building of competitive industries and enterprises based on sound business principles" (IDC 2018).

national crisis which is further attributed in large part to the increasing urban population (par. 17). Notably, the “rapidly depleting supply of fresh water” is constructed as grave for “the country’s economic hub, Gauteng” whose population relies on “water-intensive industries” (par.18-20). The challenges facing investment in water security in the country, particularly the “threat of ageing infrastructure and the widespread prevalence of acid mine drainage across the Vaal Reef” polluting drinking water (par. 21-22). Nevertheless, the argument goes, this should be a “rallying cry for consumers, business and civil society to invest in modern infrastructure and also help change consumers attitudes towards this resource” (par. 23). Matshekga notes that the legislation required to “galvanise action” already exists, mentioning carbon taxes in particular (par. 24-25). The text closes by framing the crisis as providing “great opportunities for entrepreneurs to build world-class water supply and treatment infrastructure” (par. 26).

The article occurs in the voices section of the *City Press*. This section serves a space for intellectual opinion and debate, providing those with ‘expertise’ on an issue to voice their concerns without necessarily belonging to the journalism discursive regime. Although theoretically the section acts as platform for the ordinary citizen to express their views, rituals round the circumstances of speech (as discussed in relation to discursive techniques of exclusion described by Foucault in Chapter 2) prohibit particular discourses and privileges commentary from elite members of society. Matshekga has access to a platform to express her attitudes regarding the drought not only based on her professional position as the IDC’s divisional executive for agroprocessing, industrial infrastructure and new industries, but also based on her identity as a black woman ostensibly sympathetic to the grassroots context and thus, she speaks with authority. In this way, discussions about the drought are confined to specific aspects of amelioration such as the development of modern infrastructure and restricting and taxing urban water use. Consequently, discussions about the drought are omitted, particularly that of industrial development contributing to drought conditions and water scarcity. The discourse of sustainable development is thus disseminated to the broader readership of the *City Press*. The assumption that there is no alternative to unrestricted economic growth is supported and is constructed as ‘truth’ consistent with capitalist ‘truth’.

In this text, Matshekga constructs an argument in which the drought is exacerbated by the irresponsible use of water by households. In essence, the crisis of drought gets

relexicalised as an opportunity for innovation. To make this framing clearer, I begin my analysis of this text at a macro level (Richardson 2008) by analysing the overarching narrative which constructs the drought crisis as the result of ‘misinformed’ consumer attitudes about water. In terms of Todorov’s narrative stages, the state of equilibrium at the beginning of the text is that South Africa is making progress in developing infrastructure in townships and rural areas of the country. This equilibrium is disrupted by worsening drought conditions which require strict water restrictions and tariffs to be imposed in the Western Cape. Furthermore, the crisis is made worse by consumers who presume water supply to be a right, an increasing urban population, water-intensive industries and ageing infrastructure. Matshekga recognises that the conditions which have been “largely confined to the Western Cape” are now becoming a national crisis, evident by the “rapidly deleting supply of fresh water” that Gauteng (the economic hub) faces. Furthermore, she has heeded the warnings by industry stakeholders over the years leading her to take action by arguing for the development of world-class infrastructure which is claimed to be the solution to the crisis. Matshekga argues that the drought needs to be a “rallying cry” for consumers, businesses and civil society” to change attitudes about water and to invest in modern infrastructure. The desired re-equilibrium is that South Africa has world-class infrastructure which alleviates water-scarcity. Water is constructed as a lack which can be remedied by the development of modern infrastructure. As an industry representative herself, Matshekga is positioned as a seeker-hero and acts to rally business, consumers and civil society (par. 20) to take initiative (*we must act now*) and to turn the drought crisis around.

To argue for the desired re-equilibrium of developing modern infrastructure, Matshekga employs a series of ethical strategies (Richardson 2008). Matshekga makes a logetic, deductive argument that because rainfall is the primary source of water, South Africans feel as though they don’t need to pay for water supply. Furthermore, because water supply is a basic right, South Africans feel entitled to the resource. An inductive argument is then made that compares the generation of electricity to the supply of water (par. 4-7). It is argued that consumers’ attitudes about electricity involves an understanding that electricity requires investment and capital while in contrast, water is considered to be a “free resource” by consumers. Matshekga thus argues that consumers should consider water to be a commodity, just as they would electricity. Additionally, Matshekga makes an ethotic argument based on her authority as an industry professional as well as on her identity as a black woman from Gugulethu, where ongoing battles for development occur (par. 15).

Furthermore, by describing the drought as ‘undoing’ years of progress in the townships, Matshekga makes a pathetic argument, speaking to the past suffering of the South African people and hints at the slow progress made by the post-apartheid government. Matshekga does not hedge her expertise in the matter of the drought crisis and asserts with certainty that “we *must* act now” and elaborates on how South Africans should act. Matshekga euphemises her interests by identifying herself with South African consumers by using personal pronouns (*we*) and noting that she herself is from a township (Gugulethu) historically hindered by lack of development. At the same time, she uses her identity as a consumer to chastise other South Africans for their presumed blasé attitudes about water. Matshekga’s comradery with consumers places her in a position to mediate between the “industry stakeholders” and the uninformed public. By invoking a sense of sameness based on being mutually affected by water-shortages, evident by the first-person plural pronoun “*we*”, Matshekga attempts to obscure her privileged position (and therefore economic resources) by unifying various social actors. This unification implies that the responsibility and blame for the crisis is shared among South African consumers. This use of ‘*we*’ is ironic as it calls for South Africans as a collective to change attitudes about water while omitting a discussion about how water-intensive industries can be replaced with green, sustainable solutions. In this way, Matshekga has constructed a particular narrative about the drought in which the public feel entitled to a free resource because they misunderstand how infrastructure works and have a limited comprehension of their underdevelopment. Consequently, the article provides no sense of the role of government as serving the citizenry by providing basic public services and ensuring environmental justice. Although Matshekga acknowledges that the water shortages are undoing progress in the township, she relates this to the development of the economy, rather than to the standard of living of the people in impoverished communities, who, under apartheid regime, were not given adequate access to the basic services they now feel entitled to. As a result, the drought is framed as an opportunity to develop and modernise South Africa’s urban infrastructure so that the country can compete in the global economy, but not necessarily to enforce environmental or social justice. Matshekga uses assonance (see Chapter 3) and calls for South Africans to look past the “doom and gloom” and focus instead on urban development.

This narrative is supported by the overall argument that the drought is an opportunity to unite social actors to a common goal led by “warnings” from “industry stakeholders”. Enterprises that promote development are constructed as helpers that seek to

transform the situation of water-scarcity and thus euphemise the interests of the power-elite. ‘Development’ is framed as automatically positive rather than as continuing the global exploitation of scarce non-renewable resources. The mining industry uses three percent of the water drawn in South Africa (Haggard; Sheriden & Harding 2015). Furthermore, Eskom, South Africa’s electricity public utility, uses the same amount of water that a single person would use in a year in one second (Greenpeace 2018). Moreover, industry is supplied electricity at cheaper rates than residents. Nevertheless, South African households are positioned as major attributors to the water shortage and drought crisis while the contributions of major industries (mining and irrigation) who pollute and excessively overuse water is underplayed. The discourse of ‘sustainable’ development which acknowledges that natural resources such as fresh water are limited yet continued economic growth is thus advocated for. Moreover, ecologically rich regions³², Mpumalanga, Limpopo and the North West, are described as “mining towns”, reducing them to the relation to the extractive industry.

The drought crisis causing the water shortage in the country is anthropomorphized as “crippling” to emphasise its impact on the Western Cape (par. 9). Giving the drought agency emphasizes the urgency of the issue, rallying consumers to act immediately to avoid being further harmed by the drought. Consumers are described as being “in the wake of” the drought, further supporting the construction of the drought as an active agent that has devastated the region and has left consumers in the aftermath. The use of modal verbs ‘*would*’ in the first paragraph is used ironically to emphasize the failure of consumers to change their attitudes (“you ‘*would*’ be wrong”).

As a result of this framing, a discussion about replacing harmful industries with environmentally-sustainable alternatives is omitted, for example, transitioning from coal-powered energy stations to solar power (which is part of the modern “world-class” infrastructure advocated for in the text). Development of infrastructure is framed as necessary to facilitate the uninterrupted functioning of industry. This is despite current industrial practices being a major contributor to climate change to which aggravated drought conditions are attributed. The narrative further omits any discussion of the drought as being aggravated by industrial activity, yet it holds consumers accountable for contributing to the crisis.

³²Freshwater ecosystems in Mpumalanga, for example, have “high value ecological infrastructure for delivering water for human use” and at least five important rivers systems rise in its highlands, thus accounting for a significant part of Strategic Water Source Areas and is critical water security in the country (Mpumalanga 2018).

Matshekga notes that the tariff increases owing to the water-shortage has affected townships in particular, yet this concern frames tariff increases as an undoing of development rather than as an infringement of the basic right to water. Furthermore, water supply is noted to be contaminated by pollution from mining, yet this is discussed as an inevitable strain on water but not as an industry that needs to adjust attitudes and practices. The adverse environmental impact of major industries is naturalised and framed as an inevitable process. Matshekga thus argues that solutions to the water-crisis must be found in the upgrading of infrastructure and by restricting urban water use. Moreover, reducing the drought to only its impact on development omits any reference to climate change and dismisses the necessity of the natural environment to human life beyond being a commodity to be used and discarded, once again suggesting business should carry on as usual. I now move on to discuss the final article selected for this study.

4.5. The borehole helped, but funding is needed to save town from day zero (Appendix 5)

More money is needed to drill additional boreholes in a bid to save the drought-stricken Beaufort West from day zero, but there is enough to take residents of the Karoo town through the festive season (Tau 2018 par. 1).

The 13-paragraph news text (Poloko Tau, ‘The borehole helped, but funding is needed to save town from day zero’, *City Press*, January 02, 2018) reports on the use of borehole water to ameliorate the impact of the drought in Beaufort West: it is going to “save” the drought-stricken Beaufort West from day zero. Beaufort West is located in the arid Karoo and is thus highly susceptible to drought conditions. The financial aspects of the borehole project are emphasized as it is argued that funding is needed to extend the project which will currently (at the time of publication) only supply water over the festive season. The article was written in January, towards the end of the festive season. A close reading of the text enables the identification of the discourse valorised in this article.

I begin this analysis by presenting a short synopsis of the text. The water-crisis in Beaufort West - a small town with a population of 34 000 residents is contextualised in this article (par. 1-2). Although there is currently enough water to supply the town throughout the festive season, the boreholes are not yielding the anticipated amount of water (par. 2). The borehole project was expected to fulfil the requirements of the main water supply, the Gamka Dam, which is now completely dry because of the drought (par. 3). It is thus anticipated that the town will be severely affected by ‘day zero’, hence residents have been

warned to use water sparingly (par. 4). A specialist has expressed concern that the five boreholes are not yielding the amount of water anticipated and argues that the drought is worse than anyone had expected (par. 6). Nevertheless, using his “scientific knowledge”, the specialist describes the organisation’s plans to expand the project while seeking to preserve aquifers (par. 7-10). To expand the project, the organisation argues that they will need “active financial support from government” (par. 11). The article concludes by presenting comments from the town mayor that the situation was “not too bad” but urging residents to continue regulating their water use (par. 12-13). Two sources are included in the text, a representative of the Gift of the Givers Foundation and a representative of the government, Mayor van der Linde.

A narrative analysis enables the framing of the article to be made explicit at the macro level (Richardson 2008). Borehole water is framed as a means of mediating the impact of the drought. In terms of Todorov’s stages, the state of equilibrium is that water supply is sufficient for the whole town. This equilibrium is disrupted by drought conditions that are “far more severe than anyone has comprehended” (par. 6). This disruption is recognised by the Gamka Dam, the main source of water being dry (par 3). The GGF specialists take action to remedy the situation by starting the borehole project. The specialists then realise that the initial five boreholes are not yielding the required amount of water (par. 2). They thus construct plans to expand the project and appeal to government for “active financial support” and “greater investment in drilling more boreholes and putting [in] additional water pipelines and other infrastructure” (par. 11). It is implied that the desired re-equilibrium would be that the town is provided with sufficient water as the government continues to fund the expansion of borehole project thereby relieving pressure on the aquifers currently being used.

Turning to Propp’s character functions enables identification of the actors of the narrative. The drought is constructed as a lack (of water) that must be overcome by the seeker heroes (GGF) on behalf of the family (residents of the town). The GGF act to remedy the situation, invoking the help of a donor (the government) to bestow a magical agent (funding). The framing of the GGF as seeker heroes is further evident through a transitivity analysis which depicts the construction of the GGF in primarily transitive material and verbal processes. The GGF make an active attempt to save the town (by “heading” the project, “rais[ing]” concerns and “using” scientific knowledge). Moreover, the GGF is

constructed as a powerful actor that is empowered to make decisions and thus verbalises its insight. This is evident in its mental process of cognition (“*decided*”, “*raised concerns*”).

An analysis of binary oppositions further depicts the importance of the GGF’s quest to provide water to the disempowered metaphorical family, the town, do nothing and fail to act.

Gift of the Givers Foundation	Local government
“said”	remains quiet
has been “heading” the project	has been doing nothing
“raised” concerns	silent about concerns
“using” scientific knowledge	lacking scientific knowledge
“decided”	indecisive
already “found” boreholes	did not search for boreholes
“can safely pump” water from boreholes	did not attempt to pump water from boreholes
can “access” boreholes	fail to attempt accessing boreholes

Table 5: Binary oppositions for Gift of the Giver’s Foundation

The GGF are thus positioned as heroes who act to solve the water-shortage crisis. They are bestowed with credibility based on their expert scientific knowledge. A binary oppositions analysis depicts the GGF as actively finding solutions to the crisis and implementing them effectively as opposed to waiting passively. Without the GGF, no action would be taken, people are rendered indecisive and the appropriateness of the borehole project and its limitations is silenced. This construction suggests that the GGF rather than the government or Beaufort West residents act to mediate the water-shortage crisis. The necessity and efficacy of the GGFs project is not questioned as the organisation is positioned as credible and legitimate, evident in its inclusion as one of two sources articulated in the text.

Modes of persuasion are employed to argue that funding for the expansion of the project is necessary. The personal credibility of the foundation is established through an ethotic argument based on their status as a “humanitarian organisation”, implying that the organisation acts in the interests of the community. That this is so goes unquestioned. While the ethotic argument endorses the speakers as credible and authoritative, the text incorporates a pathotic mode of argument that appeals to the readers for empathy for residents of the town who “desperately praying for rain daily”. The government is invoked as being able to answer these prayers by providing funding to supply the town with water in the interim. A logetic argument

is then proposed through a series of assertions that ultimately conclude that funding is needed to save the town:

Proposition 1: The main water supply (Gamka Dam) is completely dry (par. 3)

Proposition 2: The region will hit day zero soon (par. 4)

Proposition 3: Specialists say more boreholes are needed (par.5-7)

Claim A: Government should provide funding for boreholes (par. 8).

This argument is supported by various rhetorical strategies emphasising the credibility of the foundation. In an epideictic argument, Dr. Groenewald is named as a ‘specialist’, “hydrologist, geologist and palaeontologists” and is further described as “using his scientific knowledge” (par. 7), instilling him with an authority which constitutes his professional opinion as a scientific ‘truth’. The arguments for the credibility and ethos of the speakers in the text is useful in facilitating public support for the project and in turn enacting political action which in this case, is making funding available for the borehole project. Nevertheless, an interpretation of scientific information regarding the use of borehole water is omitted from the text as is a discussion about freshwater. As a result of this framing, little space is allowed to discuss the finer aspects of the use of boreholes for water supply, particularly, the implications of overextending aquifers, why it has not been a primary supply of water until the disaster struck and what alternatives exist. Furthermore, the finer details about the Gift of the Givers’ is omitted, particularly how they are funded and whether the municipality of the area is required to pay back funds spent by the Gift of the Givers. Additionally, a deliberative argument focussing on potential future events is made. It is argued that the drought conditions are worse than anticipated so boreholes need to be drilled in order to supply the town with water beyond the festive season. At the end of the text, the mayor of the town, Jacob van der Linde, argues that the situation is under control and if residents continue to use water sparingly there will not be a problem (there are backup plans in place, i.e. Jojo tanks). These arguments based on the credibility of sources and sympathy for the public reflects the power dynamics within the text which allows particular voices to be expressed in particular circumstances. In this way, discourses are compartmentalised (Tomaselli, Tomaselli & Muller 1987), and the limitations of borehole use, that is, the potential of overusing and depleting the water supply is omitted from the text. Furthermore, the government’s inadequate planning for inevitable water shortages in the dry region. Furthermore, that Eskom, South Africa’s electricity public utility, uses the same amount of water that a single person would use in a year in one second (Greenpeace 2018), is omitted.

A discursive analysis of the voices included in this text reiterates the news values of mainstream news media. The text includes three sources, namely, Dr. Sooliman and Dr. Groenewald of the GGF and the town's mayor, Jacob van der Linde. The GGF are positioned as credible sources with expert knowledge and humanitarian goals and are accepted as trustworthy and thus bestowed with authority on the matter of the construction of boreholes for drought relief. To maintain 'balance' and 'objectivity' a statement by the mayor (the political elite) is included in the last few paragraphs of the text. The voices of the residents of Beaufort West are omitted from the text as are any non-expert voices. What is discussed regarding the use of borehole water is thus limited to a discussion by a non-governmental disaster relief organisation. A discussion regarding the disadvantages and dangers of borehole drilling is overlooked as in any discussion about climate change which is unsurprising considering news imperatives (Chapter 2).

The text frames freshwater supply and borehole water as the only and most effective solution to the water shortage in Beaufort West. The urgency of the drought is minimised in some sense as an alternative to rainwater is provided, thus legitimating, (or at least ignoring or prolonging and at least not opposing), practices that pollute water supplies and aggravate extreme weather conditions. The urgency of the issue is further undermined by the government representative's assertion that conditions are stable. Overall, the text constructs the drought as an event that is inevitable, and the only action South Africa can take is to continue to develop supply of water from freshwater supplies. Although Beaufort West is a semi to arid desert region in a period of a global changing climate, long-term implications of the drought are not discussed. Beaufort West is located in the semi-arid Great Karoo the implications of aggravated drought in the region exerting increasing pressure on freshwater supply is not discussed. The text comprises arguments which positions drought as natural and unavoidable phenomena and posits that the consequences of the drought can only be mitigated by development of alternative water supplies rather than by altering how water is used in a neoliberal society. Political action for long term restructuring of water supply and water use in the region is omitted from the text.

CHAPTER 5 – CONCLUSION

Because, underneath all of this is the real truth we have been avoiding: climate change isn't an “issue” to add to the list of things to worry about, next to health care and taxes. It is a civilizational wake-up call. A powerful message—spoken in the language of fires, floods, droughts, and extinctions—telling us that we need an entirely new economic model and a new way of sharing this planet. Telling us that we need to evolve (emphasis added) (Klein 2014).

Introduction

This study is concerned to investigate how the ongoing drought in South Africa, which began in 2015, has been framed in the mainstream news media. I am interested in determining the extent to which mainstream news media in South Africa are fulfilling their roles as news providers in a democratic society. This implies, firstly, facilitating public action by producing knowledge that might inform critical action, in this case, critical climate action; and, secondly, in terms of their monitorial role, holding elite carbon contributors to account, particularly in this instance, mining and ‘sustainable development’ enterprises. My study, however, confines itself to a single title, the *City Press*, as a consequence of the limitations of a thesis of this mature.

Because this study recognises that effective climate action is necessary to prevent further aggravation of extreme weather conditions, particularly drought in South Africa, I begin this study by contextualising the news media and natural disasters in the neoliberal economic order which prioritises unregulated growth and the accumulation of wealth and power, further disseminating a discourse that denies that immediate climate action is necessary.

I then locate my study within a Cultural Studies and Journalism Studies framework. The Cultural Studies paradigm facilitates a holistic approach to understanding how the drought has been represented in mainstream news texts. The approach views texts as a single moment in a circuit of culture that both informs and is informed by other moments, particularly representation and production. This is valuable as it provides insight into how drought is represented in news media and how these representations have come to be. To this end, I adopt a discursive approach to my analysis, informed by Foucault. A Foucauldian approach is useful as it is concerned with how knowledge is imbued with power. Elite groups in society, that is corporate enterprises and governments discussed in the introductory chapter of this study, have the authority to determine what knowledge is constituted as the truth. The

knowledge that has been constructed as the ‘truth’ about the drought disaster that South Africa is experiencing is the result of various rules and practices of the journalistic discursive regime. I thus locate my study, additionally, within the Journalism Studies framework. Mainstream journalism practitioners have embodied journalistic discourse and adhere to particular intuitional practices and routines that regulate and limit what is said about the drought, resulting in the drought being framed in a particular way. Because the mainstream media are the public’s main source of information about complex issues dealt with by the scientific community, what the public learns about the drought and climate change is channelled via them. By limiting what discourses are included in news texts, and by omitting discourses that contradict the interests of the power elite, the media is not fulfilling their roles, which are to facilitate democracy by providing adequate information for the public to make informed decisions, as well as their monitorial role, which should hold the power elite to account. Further evidence of this is *City Press*’s reluctance to participate in interviews which would have enriched this analysis, claiming that the publication is concerned with news and current affairs, and not environmental issues.

Chapter 3 then outlines my research question and the methodology and methods employed. Qualitative methodologies and methods are used in this study, drawing on the analytic strategies that emerge from the critical Cultural Studies paradigm. Qualitative methodology provides a holistic analysis enabling me to contextualise news texts to other aspects of the circuit of culture, particularly production of texts. Because the mainstream news media are vital in constructing public opinion about the drought and consequently climate change policy, this study analyses news texts published by the *City Press*. The *City Press* positions itself as a watchdog to those in power and a source of information that is vital to public participation in a democracy and is thus mandated to provide critical information about the drought, its causes and possible solutions to the crisis. Furthermore, it has a legacy of separating its corporate ownership from its political mandates as it was historically a black newspaper owned by the Afrikaner press.

To critically interrogate the framing of the drought in news texts, I employ various approaches to the textual analysis, including elements of thematic analysis and Critical Discourse Analysis. I begin by compiling a sample of texts published on the *City Press*’s online platform. I do this by conducting an online search for the keyword “drought,” and set the parameters of my search from the year the drought was declared a disaster (2015) to the

month that the ongoing disaster reached a breaking point in the Western Cape, that is, the initial declaration of Day Zero (January 2018). From this collection, I employ elements of thematic analysis to code the themes which emerge most prominently from the texts. I then select a sample of five texts based on these codes which is analysed in depth in Chapter 4. In my textual analysis of the five *City Press* articles (see list of Appendices), I work within the spirit of CDA as espoused by Fairclough (1984). CDA takes a step further than textual analysis by acknowledging the relationship that exists between the text and the broader socio-cultural and institutional context of its production (Fairclough 1992). It allows for a nuanced and in-depth analysis as it integrates the text and the context of its production, rather than focussing solely on either the text or its production. I combine macro level analysis (narrative, rhetoric and discursive) as well as micro level (lexical and transitivity) analysis (Richardson 2008).

This final chapter seeks to provide an overview and discussion of my findings about the representations of drought by the *City Press*. An interrogation of the five sample texts found that strong recurring themes emerged. While I had anticipated that the emerging themes would attribute climate change as a factor causing the drought, or that future climate action is essential for mediating the impact of the disaster, this was not the case. Rather than a wide body of knowledge about the drought crisis emerging from the text, I could easily organise the themes into four categories, discussed below. I thus conclude my study by addressing these recurring themes. In particular, these themes are: drought constructed in terms of the agricultural economy; drought as an opportunity for urban infrastructure development; and drought as an anthropomorphised agent. This recognition leads me to argue that these constructions are the result of inadequate involvement with the scientific community. I thus move to discuss the inadequate interpretation of climate science in news media. Additionally, I address balance and authority-order journalistic norms that conversely tend to result in one-sided reporting, further normalising neoliberal discourses which have been foregrounded in the publication's drought coverage. I thus begin this chapter with a discussion on drought and the agricultural economy.

5.1.Drought and the agricultural economy

The analysis of five sample texts based on a thematic analysis of a larger collection of texts revealed that the drought disaster is framed in terms of fiscal value and its impact on South Africa's GDP and economy. The financial implications of the drought are

foregrounded in the five sample texts. Food production is framed as a major industry whose profitability is diminished by the drought in turn affecting South Africa's GDP. Although this has an impact on consumers as it affects food prices, the impact on industry stakeholders, specifically, the financial impact of the drought on the agricultural industry, is foregrounded. These discussions about industrial agriculture incorporates three aspects pertaining to commercial farming, that is, the large-scale importing and exporting of agricultural produce; emerging farming enterprises; livestock; and, finally, irrigation and water allocations for farming enterprises. The text 'Drought: As farmers wait for Gordhan, Agri SA warns of job losses, influx of migrants' (Appendix 2) epitomises these concerns as it relies solely on sources from the agribusiness industry and discusses the drought in terms of its impact on the agricultural industry. Major agribusinesses are given the authority to construct the 'truth' about the drought. The framing of drought in this way results in an omission of other discourses relating to the drought. What is particularly noteworthy is the omission of any discussion about drought-resistant crops and the vulnerability of semi-arid regions to drought. If drought conditions are to become more frequent in a continuously warming climate, discussions about alternatives are necessary to inform critical action. This would be vital not only to the economy but to the livelihoods of South Africans. Furthermore, there is no discussion about climate policy that will protect the non-elite, for example, farmworkers, migrant labourers and subsistence and emerging farming enterprises. The sources solicited to produce knowledge and 'truth' about the drought are predominantly corporate players in the agribusiness sector with financial interests in agricultural success. Yet these interests are not critiqued, nor is the economic mode that is normalised by the journalistic practice of providing contesting sources of information and opinion to balance reporting. Ironically, the global exchange of food products is normalised despite global transportation being a major contributor to carbon emissions that is causing aggravated drought conditions in South Africa.

5.2.Drought and urban infrastructure

Further development and modernisation of South Africa's infrastructure is positioned as the only means of combating the drought. This involves developing urban areas to better function in a neoliberal economy that prioritises consumption and continuous growth. The drought is framed as a crisis that can only be solved by reducing urban (household) water use and by building infrastructure to ensure the longevity of water-intensive industries. Development of urban areas is argued to involve, on the one hand, infrastructure upgrades

and development of dams, boreholes and piping, and on the other hand, an ideological shift in the mind-sets of South African consumers. In this way, residential water use is framed as the major contributor to water scarcity. Furthermore, water itself is framed as a commodity with its economic value being foregrounded above its value to the environment and people. By limiting the discussion about water intensive industries to household water use, the extensive use of water by industry is rendered both invisible and normalised as inevitable. This theme is clearly evident in the texts, ‘We must act now to turn the drought crisis around’ (Appendix 4) and ‘the borehole helped but more funding is needed to save town from day zero’ (Appendix 5).

Any discussion about building green societies is overlooked. While the argument for development is important for climate action, coverage of development is limited to discussions of capital-driven growth, rather than regenerative and sustainable growth. This is line with the denial-driven discourse discussed in Chapter 1 that posits that urban development and ecological sustainability are simultaneously possible. Furthermore, technology is constructed as being able to solve the climate crisis, despite the fact that the technology to reverse the crisis does not yet exist. In the meantime, the technology that does exist cannot counter the extensive and continuous damage caused by greenhouse gas emitting industrial technology, which is the driver of climate change, yet this is omitted from discussions.

5.3.Drought as an active agent

Coverage of the drought tends to frame the disaster as an active agent that seeks to destroy the South African economy. The drought is constructed in active and material terms and is frequently signified as “the *devastating* drought” or the drought that “*devastated*” the country. In this way, the drought is anthropomorphised as an agent seeking to destroy farming enterprises. This obscures the fact that the drought has been aggravated by human activity. Consequently, the drought is constructed as an inevitable force of nature rather than a natural phenomenon that is exacerbated by harmful capital-driven industrial and mining practices. Fingering the drought as the agent causing destruction, allows a discourse of development to be further legitimised. ‘Development’ is not framed as an attributor of the destruction experienced by the country but instead as something that can counter the drought’s impact on the economy. In the process, climate change as a cause of drought is thus not placed on the agenda for discussion. Consequently, public opinion about the issue is not encouraged, thereby

hindering effective political action and decision-making. This is particularly clear in the text, ‘Weak La Niña a fillip for SA’ (Appendix 3) and ‘The high cost of SA’s worst drought 23 years’ (Appendix 1).

Conversely, the La Niña is constructed as a random act of nature that has monetary value, but it is not given the same agency as the drought and the El Niño. Rain and the La Niña weather pattern are presented as magical agents that will solve the drought crisis, while any discussion of potential flooding that could accompany extreme La Niña events is almost entirely omitted or trivialised.

5.4.Inadequate interpretation of climate science

Thorough reporting about the drought is undermined by routines and practices that privilege ‘newsworthiness’ over critical information. As a consequence, the climate science that explains the droughts that are occurring is not interpreted clearly by journalists. The La Niña is positioned as a surety, overlooking clear indications that the emerging phenomenon will be weakened while the El Niño was stronger than average. The susceptibility of semi-arid regions like southern Africa to El Niño patterns is disregarded, as is the extent of the aggravation of the El Niño as a result of climate change. The resulting construction of drought in these mainstream news texts can be attributed in part to lack of understanding about climate change events by journalists who, perhaps constituted as subjects, normalise capital-driven discourse. Discussions of complex weather patterns, clean energy and particularly climate change policy (as *City Press* is first-and-foremost a political news publication) is omitted from coverage of the drought. Therefore, the scope of what is considered political news needs to be expanded to include climate policy.

5.5.Authority-order norms and restricted discourses

The tendency to privilege elite voices in news texts leads to prejudicial reporting. Elite ‘sustainable development’ institutions are selected to speak for vulnerable communities and only a particular discourse of sustainable development is articulated, that is, the one that endorses a capitalist mode of economy while simultaneously attempting to mitigate the impact of development on the environment. The opinions of farmworkers and climate scientists are omitted from coverage of the drought, resulting in a singular discourse about drought and agriculture being disseminated.

5.6.Militancy

A response that emerges increasingly from the texts is that of militancy and taking measures to control the population. This appears clearly in 2018 as the drought is officially declared a national disaster.³³ Political parties call for the drought, which was initially provincial disasters, to become classified as a national disaster to allow for military and police resources to be made readily available. Regulatory measures involve policing areas of severe water shortages and policing immigration from neighbouring countries. This response accompanies increasing concern of migration from neighbouring countries and concern regarding how water shortages will affect tourism in upmarket areas of the Western Cape. The extreme water shortages leading to the declaration of ‘day zero’ required water supplies to be rationed.

Conclusion

The coverage of the drought crisis raises questions regarding attitudes towards natural disasters, particularly why a crisis that has a significant impact on the delivery of environmental justice is framed in terms of the extent to which it impedes on the economic progress of the country. The coverage of the drought perpetuates neoliberal discourse. It does so by privileging the voices of the power elite, corporate enterprises and sustainable development organisations. The weakened economy is positioned as the most severe result of the drought. In this way, capital’s interests are furthered as the notion that business must continue as usual, even during severe drought conditions is emphasised. For example, even though the drought has resulted in poor harvests, export and trade must continue or be increased. Unemployment is constructed as hampering the economy rather than as a social issue, evident in the blasé attitudes towards the plight of migrant labourers. Development is further used as a means of furthering the interest of capital. Development of infrastructure and technology is positioned as a solution to the drought crisis, yet any mention of green solutions is omitted from the discussion. This is particularly relevant to the agriculture industry, as green technologies and strategies are overlooked.

The mainstream media, in this case, the *City Press*, are linked to corporate capital and

³³Two additional examples of this is a statement by Helen Zille asserting that the armed forces would be deployed in the Western Cape should Day Zero become a reality (Ndileka Lujabe, *City Press*, ‘Day Zero looms nine days closer than expected’, January 24, 2018). Additionally, the article, “Save water like your life depends on it”, says Zille, as army is on standby” (*City Press*, January 24, 2018), describes the South African Police Service as having “devised a plan for police officers, the military and traffic officers to help monitor water distribution points across the metro”.

multinational corporations, placing them in a contradictory position. They thus do not provide adequate information to facilitate public opinion and in turn, action, about drought and climate change, as well as about potential climate policies and regulation of harmful industries. Furthermore, the impact of the drought on populations who rely on natural resources for survival, such as rural subsistence farmers, is almost entirely omitted.

The findings of this study relate to a single title, the *City Press*. The *City Press* is a mainstream publication which prioritizes broad circulation and consequently, competition with other mainstream titles for advertisers. Critical coverage of environmental issues is present in independently-owned publications, such as the *Mail and Guardian* as well as in niche-market publications, such as the *Green Times*. The oligopoly existing in South Africa's press landscape inadvertently diminishes a plurality in the number of titles that can exist, as competing with multinational corporations, such as Naspers (the *City Press*'s owners) is challenging and procuring funding without advertisers presents a further challenge. This poses a problem, as journalists who could potentially produce environmental news are offered more financial stability by mainstream news organisations. Furthermore, issues pertaining to climate is excluded from concerns about politics and current affairs, despite a significant aspect of the climate crisis being inadequate policymaking.

My study, confined to a single title, points to the need for more research into the media's coverage of climate change needs to be done, particularly in the South African context. Mainstream newspapers, such as the *City Press*, which claim that their mission is to provide critical coverage of political affairs, fail to cover policy relating to climate change and drought. The lack of specialised environmental journalists working for mainstream publications has resulted in a dire lack of information about climate issues being provided to the public. Consequently, the public is insufficiently informed about vital issues. The overwhelming focus on current affairs in mainstream news is the result of the oligopoly of the media industry which prevents thorough engagement with social issues beyond political mudslinging. It is my opinion that the *City Press*'s unwillingness to participate in interviews to interrogate the coverage of the drought is part and parcel of this.

As a final point, broad debates about a transition from fossil fuels have recently begun occurring under the rubric of a just transition. This focus calls for careful monitoring and research as it is concerned precisely with the issue of climate change and attempts to mitigate the pending disaster should there is business as usual.

REFERENCES

- Academy of Science of South Africa (ASSAF). 2014. *The state of green technologies in South Africa*. Academy of Science of South Africa. [Online] Available at <https://www.assaf.org.za/files/2015/05/8-Jan-2015-WEB-526305-ASSAF-Green-Tech-mail.pdf>. Accessed 19 October 2018.
- Adelzadeh, A. 1996. From the RDP to GEAR: The gradual embracing of neo-liberalism in economic policy. *Occasional Paper*. Johannesburg: NIEP
- Ads24. 2018. Demographics/City Press.co.za. *Ads24* [Online] Available at <https://www.ads24.co.za/misc/publication?brand=citypresscoza&key=E1079512DA2EC078C9506DA2F3D55AB4>. Accessed 28 December 2018.
- AgriSA 2018. About Us. *AgriSA* [Online] Available at <https://www.agrisa.co.za/about>. Accessed 10 February 2018.
- Alexander, J.C. 2015. The Crisis of Journalism Reconsidered: Cultural Power. *Fudan Journal of the Humanities and Social Science*, 8: 9-31.
- Allum, N et. al. 2014. Religious beliefs, knowledge about science and attitudes towards medical genetics. *Public Understanding of Science*, 23 (7): 833-849.
- Amadi, F. 2010. The Role of Nominalization in Newspaper Coverage of the 2005 National Political Reform Conference in Nigeria. *International Journal of Social Sciences and Humanities Review*, 1: 40–49.
- Amadi, L. and Agena, J. E. 2015. Globalization, Culture mutation and new identity: Implications for the Igbo cultural heritage. *African Journal of History and Culture*, 7 (1): 16-27.
- Ardèvol-Abreu, A. 2015. Framing theory in communication research: Origins, development and current situation in Spain. *Revista Latina de Comunicación Social*, 70: 423-450.
- Aylett, A. 2010. Participatory Planning, Justice, and Climate Change in Durban, South Africa. *Environment and Planning*, 42: 99-115.
- Babbie, E. R. and Mouton, J. 2001. *The Practice of Social Research*. Oxford: Oxford University Press.

- Babbie, E.R. and Mouton, J. 1982. *Methods of Social Research*. New York: Free Press.
- Barker, C. 2010. Structuralism, Poststructuralism, and Cultural Studies. *The Encyclopedia of Literary and Cultural Theory*.
- Barrett, J, Nzimande, F, Cock, J and Naudé, L. 2017. A just transition to a low-carbon and climate resilient economy. *Congress of South African Trade Unions (COSATU)* [Online] Available at https://www.sagreenfund.org.za/wordpress/wp-content/uploads/2017/05/Naledi_A-just-transition-to-a-climate-resilient-economy.pdf. Accessed 10 February 2018.
- Basson, A. 2012. *Zuma Exposed*. Johannesburg: Jonathan Ball Publishers.
- Basson, A. 2018. ‘The house of Zupta is tumbling down’, *News24*. February 14, 2018. [Online] Available at <https://www.news24.com/Columnists/AdriaanBasson/the-house-of-zupta-is-tumbling-down-20180214>. Accessed 19 October 2018.
- Bauer MW, Durant J. and Evans G. 1994. European public perceptions of science. *International Journal of Public Opinion Research* 6 (2):163–186.
- Beder, S. 2006. Suiting themselves. *How Corporations Drive the Global Agenda*. London and New York: Earthscan.
- Bell, A. 1991. *The Language of News Media*. Oxford: Blackwell.
- Bell, A. 2014. The New Climate Optimists: Can we be rationally hopeful about the environment?. *Road to Paris - ICSU*. 18 September 2014. [Online] Available at <http://roadtoparis.info/2014/09/18/new-climate-optimists-can-rationally-hopeful-environment/>. Accessed 13 October 2018.
- Bennett, W.L. 1996. An introduction to journalism norms and representations of politics. *Political Communication*, 13: 373-384.
- Biello, D. 2017. How Far Can Technology Go to Stave Off Climate Change?. *Yale E360*. January 18, 2017 [Online]. https://e360.yale.edu/features/how_far_can_technology_go_to_stave_off_climate_change. Accessed 13 October 2018.
- Boko, M. et al. 2007. *Africa*. Cambridge: Cambridge University Press.

- Bond, P. 2000. *Elite transition: from apartheid to neoliberalism in South Africa*. Pietermaritzburg: Pluto Press and University of Natal Press.
- Bond, P. 2012. ‘Social Movements and Corporate Social Responsibility in South Africa’ paper presented to The International Society of Business, Economics and Ethics Fourth World Congress: Global Fairness – Local integrity, Cape Town, 15-18 July 2008 [Online] Available at <https://onlinelibrary.wiley.com/doi/epdf/10.1111/j.1467-7660.2008.00528.x>. Accessed 19 October 2018.
- Boykoff, M. T. and Rajan, S. R. 2007. Signals and noise. Mass-media coverage of climate change in the USA and the UK, *EMBO Reports*, 8 (3): 207–211.
- Boykoff, M.T. and Boykoff, J.M. 2007. Climate change and journalistic norms: A case-study of US mass-media coverage. *Geoforum*, 38: 1190–1204.
- Braun, V. and Clark, V. 2006. Using Thematic Analysis in Psychology. *Qualitative Research in Psychology*. 3: 77-101.
- Bronkhorst, S., Pengelly, C. and Seyler, H. 2017. *Market Intelligence Report*. GreenCape [Online] Available at: [http://www.elsenburg.com/sites/default/files/news/water/GreenCape_Water%202017%20Market%20Intelligence%20Report%20\(2\).pdf](http://www.elsenburg.com/sites/default/files/news/water/GreenCape_Water%202017%20Market%20Intelligence%20Report%20(2).pdf). Accessed 21 March 2018.
- Byrne, B. 2004. Qualitative interviewing. *Researching society and culture*, 2: 179-192. Cahill, D. 2009. Is neoliberalism history?. *Social Alternatives*, 28 (1): 12-40.
- Caney, S. 2006. Cosmopolitan Justice, Responsibility, and Global Climate Change. *Leiden Journal of International Law*, 18: 747-1020.
- Carvalho, A. 2007. Ideological cultures and media discourses on scientific knowledge: re- reading news on climate change. *Public Understanding of Science*, 16: 223-243.
- Castree, N. 2008. Neoliberalising nature: the logics of deregulation and reregulation. *Environment and planning A*, 40 (1): 131-152.
- Champ, J. G. and Brooks J. J. 2010. The Circuit of Culture: A Strategy for Understanding the Evolving Human Dimensions of Wildland Fire. *Society & Natural Resources*:

An International Journal, 23 (6): 573–582.

Chandler, D. Semiotics for Beginners: Signs. *Visual Memory* [Online] Available at <http://visual-memory.co.uk/daniel/Documents/S4B/sem02.html>, Accessed 11 October 2018.

Chapman, M. (ed.). 2001. *The Drum Decade: Stories from the 1950s*. Pietermaritzburg: University of Natal Press.

Chomsky, N. 1997. What Makes Mainstream Media Mainstream. *Z Magazine*. October 1997 [Online] Available https://chomsky.info/199710_. Accessed 4 May 2018.

Christians, C.G. et al. 2009. *Normative Theories of the Media: Journalism in Democratic Societies*. Chicago: University of Illinois Press.

City Press. 2018. Editorial: Cape's water shortages a national crisis. *City Press*. January 22, 2018.

City Press. 2018b. 'Save water like your life depends on it', says Zille, as army is on standby'. *City Press*. January 24, 2018.

Cock, J and Fig, D. 2001. The impact of globalisation on environmental politics in South Africa 1990-2002. *African Sociological Review*, 5 (2): 15-35.

Coetzee, J.H., 2016. *Sustainable development in South African environmental law and its relationship with the National Development Plan* (Doctoral dissertation, North-West University (South Africa), Potchefstroom Campus).

Commission for Environmental Cooperation (CEC), 1993. About Us. *Commission for Environmental Cooperation* [Online]. Available at <http://www.cec.org/about-us/NAAEC> Accessed 16 October 2018.

Commission for Environmental Cooperation (CEC). 2013 About the CEC. *Commission for Environmental Cooperation* [Online] Available at <http://www.cec.org/about-us/about-cec>. Accessed 08 November 2018.

Cook, J, et al. 2013. Quantifying the Consensus on Anthropogenic Global Warming in the Scientific Literature. *Environmental Research Letters*, 8 (2): 24020.

Corbett, J.B and Durfee, J.L. 2004. Testing public (un)certainty of science: Media representations of global warming. *Science Communication*, 26 (2): 129-151.

Cordato, R.E. 2001. The polluter pays principle: a proper guide for environmental policy. *Institute for Research on the Economics of Taxation*: Washington, D.C. Cousins, M. and Hussain, A. 1984. *Michel Foucault*. MacMillan Education: Hampshire.

Cray, C. 2011. Greenpeace Analyzes the Lewis Powell Memo: Corporate Blueprint to Dominate Democracy. *Greenpeace*. September 21, 2011. [Online] Available at <https://www.greenpeace.org/usa/greenpeace-analyzes-the-lewis-powell-memo-corporate-blueprint-to-dominate-democracy/> Accessed 03 December 2017.

Curtin, P.A. 1995. 'Textual Analysis in Mass Communication Studies: Theory and Methodology'. Paper presented at the Annual Meeting of the Association for Education in Journalism and Mass Communication 78th, Washington, DC, August 9- 12, 1995.

Daniels, G.2013. *State of the newsroom South Africa: Disruptions and transitions*. Johannesburg: University of the Witwatersrand.

Data360. 2010. The average US citizen uses 500 litres of water per day. *Data360* [Online] Available at http://www.data360.org/dsg.aspx?Data_Set_Group_Id=757. Accessed 08 November 2018.

de Waal, M.D. 2012. City Press: 30 years later, still the people's paper. *Daily Maverick*. May 04, 2012 [Online] Available at <https://www.dailymaverick.co.za/article/2012-05-04-city-press-30-years-later-still-the-peoples-paper/>, Accessed 5 September 2018.

de Wit, M and Stankiewicz, J. 2006. Changes in Surface Water Supply across Africa with Predicted Climate Change. *Science*, 311: 1917–1921.

Debab, N. 2011. Globalization and Privatization; Two Faces...One Coin. *International Research Journal of Finance and Economics*. 74: 7-29.

Dilley, M et al. 2005. Natural Disaster Hotspots: A Global Risk Analysis. *Disaster Risk Management Working Paper Series*, 5: 145. Washington D. C: World Bank.

Dilley, M. et al. 2005. Natural disaster hotspots: a global risk analysis. Washington D.C: The World Bank.

- Diwati, V. 2017. Drought crisis? Just turn air into water?. *City Press*. December, 24
2017. du Gay, P. (ed.). 1997. *Production of culture*. London: Sage
- Duncan, J. 2011. The print media transformation dilemma. *New South African Review*, 2: .345-368.
- Dunwoody, S and Peters, HP. 1992. Mass media coverage of technological and environmental risks: A survey of research in the United States and Germany. *Public Understanding of Science*, 1: 199–230.
- Easterling, D. R., et al. 2000. Observed variability and trends in extreme climate events: A brief review. *American Meteorology Society*, 81: 417-425.
- Emdon, C. 1998. *Ownership and control of media in South Africa*, in: *Media and Democracy in South Africa*. Pretoria: HSRC Publishers.
- Engelbrecht, F. 2015. El Nino Summit. *CSIR*.
- ENJF. 1992. ‘Environmental Networker’. Newsletter, Pietermaritzburg.
- Entman, R.M. 1993. Framing: Toward clarification of a fractured paradigm. *Journal of communication*, 43 (4): 51-58.
- Ettema, J.S. and Glasser, T.L. 1998. *Custodians of conscience: Investigative journalism and public virtue*. New York: Columbia University Press.
- Fairclough, N. 1992. Discourse and text: Linguistic and intertextual analysis within discourse analysis. *Discourse & Society*, 3 (2): 193-217.
- Fairclough, N. 1995. *Critical Discourse Analysis*. London, Longman.
- Fairclough, N. 1998. Political discourse in the media: An analytical framework. *Approaches to media discourse*: 142-162.
- Fairclough, N. 2001. *Language and power*. Pearson Education.
- Feignbaum et al. 1999. *Shrinking the state: the political underpinnings of privatisation*. Cambridge: Cambridge University press.
- Finlay, A. 2016. State of the newsroom South Africa inside/outside 2015-2016. *Wits Journalism Project*. [Online] Available at from http://journalism.co.za/wp-content/uploads/2018/04/State-of-the-Newsroom-report_2015_2016.pdf, Accessed 03 May 2018

- Fisher, D.R. 2010. COP-15 in Copenhagen: How the Merging of Movements Left Civil Society Out in the Cold. *Global Environmental Politics*, 10: 11–17.
- Fiske, J. 1987. *Television Culture*. London: Routledge.
- Fletcher, R. 2012. Capitalizing on chaos: Climate change and disaster capitalism. *Ephemera: Theory & Politics in Organization*, 12 (1 and 2): 97-112.
- Foucault, M. 1969. *Archaeology of Knowledge*. London: Routledge.
- Foucault, M. 1979. Discipline and punish: the birth of the prison. New York : Pantheon Books.
- Foucault, M. 1981. The Order of Discourse. In Young. (Ed.) *Untying the Text: A Post- Structuralist Reader*. London: Routledge
- Foucault, M. 1982. The Subject and Power. *Critical Inquiry*. 8 (4). 777-795.
- Fursich, E. 2009. In defence of textual analysis. *Journalism Studies*, 10(2): 238-252.
- Galtung, J. and Ruge, M.H. 1965. The structure of foreign news: The presentation of the Congo, Cuba and Cyprus crises in four Norwegian newspapers. *Journal of peace research*, 2(1): 64-90.
- Gans, H.J. 1979. *Deciding what's news: A study of CBS evening news, NBC nightly news, Newsweek, and Time*. New York: Northwestern University Press.
- Gift of the Givers Foundation 2018. About Us. *Gift of the Givers Foundation* [Online] Available at <http://www.giftofthegivers.org/about>. Accessed 8 November 2018.
- Goffman, E. 1979. *Frame analysis: an essay on the organization of experience*. Cambridge: Harvard University Press.
- Gramsci, A. 1999. Intellectuals and hegemony. *Social theory: The multicultural and classic readings*: 259-261.
- Grossberg, L., 2010. *Cultural studies in the future tense*. Durham and London: Duke University Press.
- Guenther, L. and Weingart, P. 2018. Promises and reservations towards science and technology among South African publics: A culture-sensitive approach. *Public Understanding of Science*, 27 (1): 47-58.

- Hall, S. (ed.) 1997. The Work of Representation. In *Representation, Cultural Representations and Signifying Practices*: 13-74.
- Hall, S. 1985. Sjgnification, representation and ideology: Althusser and the post structuralist debates, *Critical Studies in Mass Communication*, 2 (2): 91-114.
- Hall, S. 1992. *Modernity and its features*. Cambridge: Polity Press and the Open University.
- Hall, S. 2001. Encoding/Decoding, in: *Media and Cultural Studies*. Oxford: Blackwell Publishing.
- Halliday, M.A.K. 2004. *An Introduction to Functional Grammar*. London: Edward Arnold.
- Hallowes, D. 2015. *Unpacking climate change: background notes to the catastrophe*. Groundwork: Pietermaritzburg.
- Hanitzsch, T. and Vos, T.P. 2017. Journalistic roles and the struggle over institutional identity: The discursive constitution of journalism. *Communication Theory*, 27(2): 115-135.
- Harcup, T and Neill, D. 2017. What is News?. *Journalism Studies*, 18 (12): 1470-1488.
- Harper, P. 2016. ‘Veterans left high and dry’ *City Press*, May 06, 2016.
- Harper, P. 2016. Yes, you can turn air into water. *City Press*. July 10, 2016.
- Harvey D. 1984. *The limits to capitalism*. London: Basil Blackwell.
- Hastenrath, S. and Greischar, L. 1993. Changing predictability of Indian monsoon rainfall anomalies?. *Proceedings of the Indian Academy of Sciences-earth and Planetary Sciences*, 102 (1): 35-47.
- Holopainen, L. 2005. *Who Did What to Whom: A Transitive Analysis of Amnesty Hearings in South Africa* (Master's thesis).
- Hugo, S. 2016. Warn your clients, a storm is brewing. *Risk Africa* [Online] Available at <https://www.riskafrica.com/la-nina-is-coming/> Accessed 12 February 2019.
- Ibarrarán, M.E., Ruth, M., Ahmad, S. and London, M., 2009. Climate change and natural disasters: macroeconomic performance and distributional impacts. *Environment Development Sustainability*, 11: 549–569.

Industrial Development Corporation (IDC). 2018. About IDC. *Industrial Development Corporation* [Online] Available at <https://www.idc.co.za/about-the-idc.html>. Accessed 08 November 2018.

Inman, P. 2011. Cameron accused of complacency after GDP growth flatlines. *The Guardian*. April, 27 2011 [Online]. Available at <https://www.theguardian.com/business/2011/apr/27/gdp-growth-flatlines-cameron-accused-of-complacency> Accessed 01 November 2018. Accessed 10 February 2019.

Intergovernmental Panel on Climate Change (IPCC). 2007. *Climate Change Impacts, Adaptation and Vulnerability*. Contribution of Working Group II to the Fourth Assessment Report of the IPCC. Cambridge: Cambridge University Press.

Intergovernmental Panel on Climate Change (IPCC). 2013. *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. Stocker, T.F. et.al (eds.). Cambridge, United Kingdom and New York, NY, USA: Cambridge University Press.

Intergovernmental Panel on Climate Change (IPCC). 2018. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty. V. Masson-Delmotte, et. Al (eds.). *World Meteorological Organization*, Geneva, Switzerland, 32.

International Energy Agency (IEA). 2018. About. *International Energy Agency* [Online] Available at <https://www.iea.org/about/> Accessed November 08 2018.

Jadezweni, A. 2018. South Africa's Femicide Stats Prove That Women Are an Endangered Demographic. *Marie Claire* [Online] Available at <https://www.marieclaire.co.za/hot-topics/south-africa-femicide-stats-2018> Accessed 11 October 2018.

Janks, H. 2005. Deconstruction and reconstruction: diversity as a productive resource. *Discourse*, 26 (1): 31–44.

Johnson, R. 1987. What is cultural studies anyway? *Social Text*, 16: 38-80.

Kalane, L. 2018. *The Chapter We Wrote: The City Press Story*. Johannesburg: Jonathan

Ball Publishers.

- Keating, D. 2018. The Paris Climate Agreement Survived Trump. Can It Survive Brazil's Bolsonaro?. *Forbes*. 24 October 2018
<https://www.forbes.com/sites/davekeating/2018/10/24/the-paris-climate-agreement- survived-trump-can-it-survive-brazils-bolsonaro/#c73326b64351>
- Khan, F. 1990. Contemporary South African environmental response: an historical and socio- political evaluation, with particular reference to blacks. Master's Thesis, Department of Environmental and Geographical Science, University of Cape Town, South Africa.
- Khan, F. 2002. The roots of environmental racism and the rise of environmental justice in the 1990s. In MacDonald, D (ed). 2002. *Environmental Justice in South Africa*. Cape Town: Ohio University Press.
- Khumalo, T. 2016. S. Africa Urged to Stop Abuse of Migrant Farm Workers. *VOA News*. January 20, 2016. [Online] Available at <https://www.voanews.com/a/south-africa-migrant-farm-workers/3154755.html>. Accessed 9 November 2018.
- Klein, N. 2011. Democracy Born in Chains: South Africa's constricted freedom. *Naomi Klein.org* [Online] Available at <http://www.naomiklein.org/articles/2011/02/democracy-born-chains>. Accessed 19 October 2018.
- Klein, N. 2014. *This Changes Everything: Capitalism vs. The Climate*. New York: Simon & Schuster.
- Klein, N. 2014b. Climate change is the fight of our lives – yet we can hardly bear to look at it. *The Guardian*. April 23 2014. [Online] Available at <https://www.theguardian.com/commentisfree/2014/apr/23/climate-change-fight-of- our-lives-naomi-klein>. Accessed 19 October 2018.
- Knight, C. 2013. What is grandfathering? *Environmental Politics*, 22: 410–427.
- Kompas, T, Pham, V.H and Che, T, N. 2018. The Effects of Climate Change on GDP by Country and the Global Economic Gains from Complying with the Paris Climate Accord. *Earth's Future*, 6 (8): 1153-1173.

- Kothari, M, and Kothari, A. 1993. Structural Adjustment vs Environment. *Economic and Political Weekly*, 28, (11): 473-477.
- Leve, A.M. 2012. The Circuit of Culture as a Generative Tool of Contemporary Analysis: Examining the Construction of an Education Commodity. *Australian Association for Research in Education* (NJ1).
- Lewis, J, Williams, A and Franklin, B.2008. A Compromised Fourth Estate?, *Journalism Studies*, 9 (1): 1-20.
- Lewis,J, Williams, A, Franklin, Bob.2008. A Compromised Fourth Estate?, *Journalism Studies*, 9 (1): 1-20.
- Lodge, T. 2002. *Politics in South Africa- From Mandela to Mbeki*. Cape Town: David Philip
- Loretti, A. and Tegegn, Y. 1996. Disasters in Africa: old and new hazards and growing vulnerability. *World health statistics quarterly. Rapport trimestriel de statistiques sanitaires mondiales*, 49 (3-4): 179-184.
- Lu, Q.B. and Sanche, L. 2001. Effects of cosmic rays on atmospheric chlorofluorocarbon dissociation and ozone depletion. *Physical Review Letters*, 87 (7): 078501.
- Lujabe, N. 2018. Day Zero looms nine days closer than expected. *City Press*. January 24, 2018.
- MacDonald, D. 1998. Three steps forward, two steps back: ideology & urban ecology in South Africa. *Review of American Political Economy*, 25 (75): 73-88.
- Mackay, H. 1997. *Consumption and Everyday Life*. SAGE: London.
- Marais, H. 1997. *South Africa limits to change: the political economy of transformation*. London: Zed Books.
- Marcia, M. 2012. 'Climate Change and Natural Disasters'. In San Jose University. (eds) *Current Controversies*. University of Chile. 247-259.
- Marketing Site. 2014. Beeld SA's most influential daily and City Press second most influential newspaper overall. *Marketing Site* [Online] Available at <http://www.themarketingsite.com/news/37159/beeld-sas-most-influential-daily-and-city-press-second-most-influential-newspaper-overall>.
- Martinez, E. and Garcia, A. 1997. What is Neoliberalism? *Corp Watch*. January 1, 1997 [Online] Available at <https://corpwatch.org/article/what-neoliberalism> Accessed 13 October 2018.
- Masondo, S. 2016. Nomvula mislead Zuma, *City Press*, September 4, 2016. [Online]

Available at <https://www.news24.com/SouthAfrica/News/nomvula-misled-zuma- 20160904>

McCombs, M., L and Shaw, D. 1972. The Agenda-Setting Function of Mass Media. *Public Opinion Quarterly* 36: 176–187.

McDonald, D.A. (ed). 2004. *Environmental Justice in South Africa*. Athens: Juta and Company Ltd.

McKnight, D. 2010. A change in the climate? The journalism of opinion at News Corporation. *Journalism: Theory, Practice & Criticism*, 11: 693–706.

McMichael, A.J. Woodruff, R.E., Hales, S. 2006. Climate change and human health: present and future risks. *The Lancet*, 367: 859–869.

Miller, D. and Dinan, W. 2015. Think tanks, ‘merchants of doubt’ and the ‘corporate capture’ of sustainable development. *The Routledge Handbook of Environment and Communication*: 86-99.

Miller, G. 1997. Building Bridges: The possibility of Analytic Dialogue Between ethnography, conversation analysis and Foucault, in Silverman, D (ed). *Qualitative Research: Theory, Method and Practice*. London: Sage Publications.

Movement Generation. n.d, From Banks and Tanks to Cooperation and Caring.

[Online] Available at http://movementgeneration.org/wp-content/uploads/2016/11/JT_booklet_English_SPREADS_web.pdf Accessed 20

December 2017.

Mpumalanga 2018. Biodiversity insights. Mpumalanga. *Mpumalanga* [Online] Available at <http://www.mpumalanga.com/>. Accessed 08 November 2018.

Muller, F. 2005. ‘Kyoto’s Grandfathering Principle as an Obstacle to be Overcome’ paper presented to Post-2012 Climate Policy: Architecture and Participation Scenarios on invitation of the Fondazione Eni Enrico Mattei (FEEM), Venice 20-21 June 2005
[Online] Available at https://www.swp-berlin.org/fileadmin/contents/products/arbeitspapiere/DiskP2005_04_mlr_sicher.pdf Accessed 14 February 2019.

Müller, F. 2005. Kyoto’s Grandfathering Principle as an Obstacle to be Overcome.

Presented in Post-2012 Climate Policy: architecture and participation scenarios on the invitation of the Fondazione Eni Enrico Mattei (FEEM), Venice, 20-21 June [Online] Available at https://www.swp-berlin.org/fileadmin/contents/products/arbeitspapiere/DiskP2005_04_mlr_sicher.pdf. Accessed 19 October 2018].

Muñoz A, Moreno C and Luján JL. 2012. Who is willing to pay for science? On the relationship between public perception of science and the attitude to public funding of science. *Public Understanding of Science*, 21 (2): 242–253.

Naspers 2018. About. *Naspers* [Online] Available at <https://www.naspers.com/about>. Accessed November 08, 2018.

National Academy Press (NAP). 1994. Solar Influences on Global Change. *National Academies Press* [Online] Available at <https://www.nap.edu/download/4778#>. Accessed 19 October 2018.

Nelson, G. C. 2009. ‘*Climate Change: Impact on Agriculture and Costs of Adaptation*’: 30. Nisbet, M. 2009. Communicating Climate Change: Why frames matter for public engagement. *Environment Magazine*, 51 (2): 12-23.

Nixon, S. 1997. Circulating Culture. in du Gay, P (ed.) *Production of Culture/Cultures of Production*. Milton Keynes: Open University/Sage.

Noone, L. 2012. ‘Greenhouse Gases and Fossil Fuels’. In San Jose University (eds) *Current Controversies*. University of Chile.

Pandey, S., Bhandari, H.S. and Hardy, B. eds., 2007. *Economic costs of drought and rice farmers' coping mechanisms: a cross-country comparative analysis*. International Rice Research Institute IRRI: Los Banos.

Park, D. 2018. United States news media and climate change in the era of US President Trump. *Integrated Environmental Assessment and Management*, 14 (2): 202-204.

Pew Research Center. 2012. More Say There is Solid Evidence of Global Warming. *Pew Research Center*. 15 October 2012 [Online] Available at <http://www.people-press.org/2012/10/15/more-say-there-is-solid-evidence-of-global-warming/>. Accessed 01 November 2018.

Powell, L. 1971. The Powell Memo. *Reclaim Democracy*.

- Prinsloo, J. 2009. Textual analysis: Narrative and argument. *Media studies*, 3 (1): 204-53.
- Purvis, T. and Hunt, A. 1993. Discourse, Ideology, Discourse, Ideology, Discourse, Ideology... *The British Journal of Sociology*, 44 (3): 473-499. Rau, D.M., 2016. *Alternative Energy: Beyond Fossil Fuels*. Capstone.
- Reese, S.D. and Shoemaker, P.J. 2016. A media sociology for the networked public sphere: The hierarchy of influences model. *Mass Communication and Society*, 19 (4): 389- 410.
- Revers, M. 2013. Journalistic professionalism as performance and boundary work: Source relations at the state house. *Journalism* 15(1): 37–52.
- Richardson, J. 2006. *Analysing newspapers: An approach from Critical Discourse Analysis*. Palgrave.
- Richardson, J.A. 1996. *Structural adjustment and environmental linkages: a case study of Kenya*. Overseas Development Institute (ODI).
- Richardson, J.E. 2008. Language and journalism: An expanding research agenda. *Journalism Studies*, 9 (2): 152-160.
- Rouault, M. 2015. El Nino Summit, CSIR.
- Rutherford, M.C. 2010. *Crop Production Potential Final*. Department of Water Affairs.
- Ryfe, D. 2012. *Can journalism survive: An inside look at American newsrooms?* Cambridge: Polity Press.
- Sama Yende, S. 2015b. Drought: Survival of the fittest at Kruger Park. *City Press*. November 15, 2015. [Online] Available at <http://city-press.news24.com/News/drought-survival-of-the-fittest-at-kruger-park-20151115>. Accessed 1 December 2017.
- Samuhel, D. 2011. La Nina Influenced Flooding in South Africa. *Accuweather*. January 26, 2011. [Online] Available at <https://www.accuweather.com/en/weather-news/la-nina-influenced-flooding-in/44853>. Accessed 01 November 2018.
- Santilli, M. et. al. 2005. Tropical deforestation and the Kyoto Protocol. *Climatic Change*, 71(3): 267-276.

- Scheufele, D.A. and Tewksbury, D. 2007. Framing, Agenda Setting, and Priming: The Evolution of Three Media Effects Models: Models of Media Effects. *Journal of Communication* 57: 9-20.
- Schulze, R.E. 1997. Atlas of Agro-Hydrology & Agro-Climatology, WRC Report TT82/96. *Water Resource Commission*, Pretoria.
- Shoemaker, P. J. and Reese, S. D. 1996. *Mediating the message: Theories of influences on mass media content* (2nd ed.). White Plains, NY: Longman
- Showers, K. 2002. The International Journal of African Historical Studies, 35(1): 230-232.
- Simon, A. and Xenos, M. 2000. Media Framing and Effective Public Deliberation. *Political Communication*, 17: 363–376.
- Simpson, P. 1993. *Language, Ideology and Point of View*. London: Routledge.
- Smith, S. 2016. Just Transition Centre Report for the OECD. *OECD* [Online] Available at <https://www.oecd.org/environment/cc/g20-climate/collapsecontents/Just-Transition-Centre-report-just-transition.pdf>. Accessed 19 October 2018.
- SPII. 2018. About Us. *SPII* [Online] Available at <http://spii.org.za/about-spii/>. Accessed November 08 2018.
- Steele, M. 2012. Water Hungry Coal. *Greenpeace* [Online] Available at <https://www.greenpeace.org/archive-africa/Global/africa/publications/coal/WaterHungryCoal.pdf> Accessed 12 February 2019.
- Steenveld, L., 2000. *Whither communication studies in the 'new 'South Africa in the new millennium?*: 81-86.
- Steffen, W., Crutzen, P.J. and McNeill, J.R. 2007. The Anthropocene: are humans now overwhelming the great forces of nature. *AMBIO: A Journal of the Human Environment*, 36(8): 614-621.
- Stoddard, E. 2017. SA weather service expects above normal rain on La Nina. *Money Web*. 29 September 2017 [Online] Available at <https://www.moneyweb.co.za/news-fast-news/sa-weather-service-expects-above-normal-rain-on-la-nina/> 04 Dec. Accessed 5 December 2017.
- Sturgis, P. and Allum, N. 2004. Science in society: re-evaluating the deficit model of public attitudes. *Public understanding of science*, 13(1): 55-74.

- Tau, P. 2015. SA drought: Up-and-coming farmer takes a blow. *City Press*. July 08, 2015. . [Online] Available at <http://city-press.news24.com/News/SA-drought-Up-and- coming-farmer-takes-a-blow-20150708>. Accessed 1 December 2017.
- TechnoServe. 2018. About Us. *TechnoServe* [Online] Available at <https://www.technoserve.org.za/about-us>. Accessed 08 November 2018.
- The Academy of Science of South Africa (ASSAf). 2014. *The State of Green Technologies in South Africa*. *Academy of Science of South Africa (ASSAf)*: Pretoria.
- The Media Online. 2017. Sunday newspapers are the week's news catch-up platform. *The Media Online* [Online]. Available at <http://themediaonline.co.za/2017/01/sunday- newspapers-are-the-weeks-news- catch-up-platform/> Accessed 7 May 2018.
- Thomas, D.S. et al., 2007. Adaptation to climate change and variability: farmer responses to intra-seasonal precipitation trends in South Africa. *Climatic Change*, 83 (3): 301-322.
- Thompson, J.B. 1990. Mass communication and modern culture: contribution to a critical theory of ideology. *Sociology*, 22 (3): 359-383.
- Thoorsen, D,E. and Lie, A. 2006. What is Neoliberalism? [Online] Available at <http://folk.uio.no/daget/What%20is%20Neo-Liberalism%2010-11-06.pdf> Accessed 7 May 2018.
- Tomaselli, R Tomaselli, K and Muller, J. 1987. *Narrating the crisis: hegemony and the South African press*. Johannesburg: Richard Lyon.
- Touwen. C. J. 2011. Resistance Press in South Africa - The legacy of the alternative press in South Africa's media landscape. Carien Jay [Online] Available at <https://carienjtouwen.wordpress.com/essays/resistance-press-in-south-africa/> . Accessed 10 February 2019.
- Tverberg, G. Twelve Reasons Why Globalization Is a Huge Problem. *Our Finite World*. February 22, 2013 [Online] <https://ourfinitetworld.com/2013/02/22/twelve-reasons- why-globalization-is-a-huge-problem/>. Accessed 7 May 2018.
- Ungar, S. 2000. Knowledge, ignorance and the popular culture: climate change versus the ozone hole. *Public Understanding of Science*, 9: 297–312.
- United Nations Framework Convention on Climate Change (UNFCCC). 2015. The

preamble to the Paris Agreement. *UNFCCC* [Online] Available at https://unfccc.int/sites/default/files/english_paris_agreement.pdf. Accessed 08 November 2018.

United Nations Framework Convention on Climate Change (UNFCCC). 2018. Parties and Observers. *UNFCCC* [Online] Available at <https://unfccc.int/parties-observers>. Accessed 08 November 2018.

van Dijk, T. A. 2006. Discourse and manipulation, *Discourse & Society*, 17(3): 359–383.
van Djik, T,A. 1995. Power and the news media. *Political communication and action*, 6 (1):9-36.

van Eemeren, F. H., Grootendorst, R., and Snoeck Henkemans, F. 1996. *Fundamentals of argumentation theory*. Mahwah, NJ: Erlbaum.

van Rensburg, D., 2018. Wealth Index: SA's corporate elite – whiter than ever. *City Press*. July 27, 2018 [Online]. Available at https://city-press.news24.com/Special-Report/Wealth_Index/wealth-index-sas-corporate-elite-whiter-than-ever-20180729 Accessed 11 October 2018.

Wahl-Jorgensen, K., et. al, 2016. The Future of Journalism: Risks, threats and opportunities. *Journalism Studies*, 17 (7): 801–807.

Walker, M. 2010. Walker's World: Bernanke the diplomat. *UPI* [Online] Available at <https://www.upi.com/Walkers-World-Bernanke-the-diplomat/32891267441260/>. Accessed 10 February 2019.

Wild, S. 2015. Factsheet: Why do many scientists think Africa will be hardest hit by climate change?. *Africa Check*. [Online]. Available at <https://africacheck.org/factsheets/factsheet-why-do-many-scientists-think-africa-will-be-hardest-hit-by-climate-change/>. Accessed 03 December 2017.

Wilson, K. M. 2000. Drought, debate, and uncertainty: Measuring reporters' knowledge and ignorance about climate change. *Public Understanding of Science*, 9 (1): 1–13.

Wintour, P. 2011. Osborne expects to hail return of economic growth. *The Guardian*. April 26, 2011 [Online]. Available at <https://www.theguardian.com/business/2011/apr/26/osborne-to-hail-return-to-growth>. Accessed 10 February 2019.

Woodhouse, P, and Ganho, AS. 2011. Is Water the Hidden Agenda of Agricultural Land Acquisition in sub-Saharan Africa?. Paper presented at the International

Conference on Global Land Grabbing. [Online]. Available at <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.460.8877&rep=rep1&type=pdf>. Accessed 1 February 2018.

Ziervogel, G., et al. 2014. Climate change impacts and adaptation in South Africa: Climate change impacts in South Africa. *Wiley Interdisciplinary Reviews: Climate Change*, 5: 605–620.

Sample texts

Brown, J.2016. Weak La Niña a fillip for SA. *City Press*. February 12, 2016 [Online] Available at <http://city-press.news24.com/Business/drought-fells-r87m-off-sappis-earnings-20160212>. Accessed January, 01 2018.

Essop, P. 2016. Drought: As farmers wait for Gordhan, Agri SA warns of job losses, influx of migrants. *City Press*. June 23 2016. [Online] Available at <http://city-press.news24.com/News/drought-as-farmers-wait-for-gordhan-agri-sa-warns-of-job-losses-influx-of-migrants-20160223>. Accessed January, 01 2018.

Matshekga, L.2017. We must act now to turn the drought crisis around. *City Press*. July 21 2017. [Online] Available at <https://www.fin24.com/Economy/South-Africa/we-must-act-now-to-turn-the-drought-crisis-around-20170721>. Accessed January, 01 2018.

sama Yende, S. 2015. The high cost of SA's worst drought 23 years. *City Press*. July 08, 2015. [Online] Available at <http://city-press.news24.com/News/The-high-cost-of-SAs-worst-drought-in-23-years-20150708>. Accessed January, 01 2018.

Tau, P. The borehole helped, but funding is needed to save town from day zero. *City Press*. January 02 2018. <https://city-press.news24.com/News/the-borehole-helped-but-funding-is-needed-to-save-town-from-day-zero-20180102>

Appendix 1

The high cost of SA's worst drought in 23 years
Sizwe sama Yende and staff reporter 2015-07-08 12:34

News

SA's worst water shortages in 23 years have caused a decline in farming output that will lower its GDP and cause food-price increases

1. The drought devastating parts of South Africa will cause the country's farmers to lose up to R10 billion this year.
2. Worst affected are KwaZulu-Natal, the Free State, Limpopo, North West and the Northern Cape, where farmers growing white maize, yellow maize, soya beans and sunflowers have incurred major losses.
3. A report released by the UN's food and nutrition working group last month found this drought – the country's worst since 1992 – had caused a decline in maize production that had already led to an increase in food prices of 6.4%.
4. “South Africa’s first maize production forecast estimates the 2015 harvest to be the worst in eight years,” it found.
5. Agricultural business chamber Agbiz CEO John Purchase said the cost of the drought was difficult to quantify.
6. “Just the maize crop is down from 14.25 million tons [worth R25.4 billion] last year to an estimated 9.84 million tons this year. This alone translates to a loss in income of close to R10 billion. The total loss amounts to [several] billions [more],” he said.
7. Grain SA chief executive Jannie de Villiers warned that the country would have barely enough white maize for its own consumption, and would need to import about 700 000 tons of yellow maize to feed livestock, which would cost farmers R1.96 billion.
8. De Villiers said: “From May this year to January next year, we can expect an additional increase of between 15% and 20% in the maize meal price,” he said.
9. Figures from the Studies in Poverty and Inequality Institute (SPII) indicate the effect could be even worse.
10. Researchers working on the SPII Basic Needs Basket Project, which monitors the prices or cost of 39 goods and services each month countrywide, have found that the price of maize meal has shot up by 37% in urban areas in the Free State, 34% in North West and 29% in Gauteng. In rural areas, prices increased by 39% in the Free State and 25% in Gauteng.
11. The price of samp, SPII researchers found, increased by 41% and 38% in the Free State and North West's urban areas, respectively.
12. Mandla Nkomo, operations director at TechnoServe, which assists emerging farmers, said the drought's impact on its clients was devastating.

13. “In irrigation areas, farmers’ water allocations have been cut back, which has had a direct impact on the incomes of those farmers,” he said.
14. “In North West, KwaZulu-Natal and Mpumalanga, which are rain-fed areas, there has been a very heavy effect on the maize crop. I know one farmer who has had to write off his entire crop. Most grains have really taken a knock. And for stock farmers, the quality of the grain feed has not been great either.”
15. “These emerging farmers are vulnerable anyway. They have no insurance, savings or anything like that, so they will take the knock full on. Basically, we have a 2015/16 season coming up for which farmers don’t have the resources to reboot themselves.”
16. Nkomo said that in the Nwanedi irrigation area in Limpopo, about 1 000 farmers had been forced to “reduce production by 50% because there is not enough water”.
17. Large companies Tiger Brands and Rhodes rely on the area for tomatoes, which will now have to be imported.
18. “We are expecting a real impact on food prices between August and November this year,” said Nkomo.
19. Purchase said the drought – which had been hitting North West, parts of the Free State and the Northern Cape for the past three years – had already diminished the country’s GDP. “Given its severity and prolonged nature, the economic effect will be, and is already, severe. The latest poor and disappointing GDP figures for agriculture – 16.6% negative growth in quarter 1 – are indicative of the drought impact,” he said. “Agbiz expects quarters 2 and 3 GDP figures to look even worse, as the full extent of the drought is only then reflected in the GDP figures.”
20. Emerging farmers, said Purchase, would be hardest hit because they did not have sufficiently strong balance sheets to absorb losses.
21. “They cannot repay their production loans, and, worst of all, are going to battle to secure financing for the new season as their creditworthiness has been severely affected. We do not have a figure, but many farmers are at risk [of losing their farms],” he said.
22. Purchase said farmers would need to make arrangements to carry over their debts, or many farming enterprises would become insolvent.
23. Absa’s agribusiness head, Ernst Janovsky, said the extent of the problem would only be seen next year.
24. “Next year is the one to watch stringently. When farmers have diversity, they don’t have trouble,” he said. “We are, however, comfortable, because it is a small area that is affected when we look at our books.”

Appendix 2

Drought: As farmers wait for Gordhan, Agri SA warns of job losses, influx of migrants *News Philda Essop, Media24 Parliamentary Bureau 2016-02-23 14:21*

1. The drought is clearly a national disaster, so it is important that South Africa makes available all possible resources.
2. Chief executive of Agri SA, Omri van Zyl, told the Cape Town Press Club that he believed the state should declare the drought a national disaster.
3. One of the consequences of the drought was, according to Van Zyl, the potential of migration from neighbouring countries, because the whole of southern Africa had been caught in the grip of the drought.
4. Various discussions about the drought had taken place between Agri SA, President Jacob Zuma, Minister of Finance Pravin Gordhan, and Minister of Agriculture, Forestry and Fisheries Senzeni Zokwana.
5. Agri SA's plan was handed over to them, and the organisation was waiting to hear the scope of the drought relief that Gordhan would make available in his budget speech tomorrow.
6. South Africa would have to import an estimated 7.3 million tonnes of grain – mealies and wheat – because of the ongoing drought.
7. Five provinces were declared disaster areas last year.
8. Farmers were experiencing a crisis with livestock. Many animals had died because of too little feed and many commercial farmers had begun reducing their herds.
9. He said that food price inflation was a reality.
10. "It has already begun. In the meat industry, probably by June, prices will increase rapidly."
11. Van Zyl said "we would begin to see the potential migration of people in the region".
12. "Zimbabwe has declared a national disaster due to the drought. There are currently 2.5 million hungry people in Zimbabwe. You can just ask yourself where they were going."
13. Agri SA was also concerned about job losses.
14. "We have about 850 000 farm workers in South Africa. If 10% or 20% of them are retrenched we will have a very serious situation," said Van Zyl.
15. Farmers needed R2.4 billion in guarantees from the state for the first year to get over

the effect of the drought get back into production, said Van Zyl.

16. Schalk Pienaar, president of Agricultural Business Chamber, said the guarantees were not for all farmers.
17. "Our main proposal to the government is that specific guarantees are issued. It is not for all farmers, but where farmers have a chance of recovery."
18. A subsidy that pays 50% of the minimum wage for farm workers who are affected by the drought was also requested from the state for six months.
19. Johannes Möller, president of Agri SA, said the plan was drafted on the assumption that South Africa had no contingency reserves.
20. If the money was not available from the state treasury, Agri SA would approach the Industrial Development Corporation, the Land Bank and commercial banks and potential international donors.

Appendix 3

Weak La Niña a fillip for SA

Business

Justin Brown 2016-06-14 07:00

1. The emergence of a weak La Niña event, •following the dreaded warmer-than-average weather pattern that was El Niño – which caused a devastating drought in South Africa – is giving hope for better rainfall and climate •conditions in the months ahead, and could result in a multibillion-rand boost for the economy.
2. El Niño events are associated with a warming of the central and eastern tropical Pacific. La Niña events are the reverse, with a sustained cooling of these same areas.
3. Wandile Sihlobo of the Agricultural Business Chamber said there were early indications that a La Niña event could happen soon – and this could result in above-average rainfall.
4. “The above-normal rainfall will replenish the soil •moisture and result in an improvement after the harsh -conditions that have resulted from the drought,” he said.
5. In addition to agricultural crops, livestock and dairy farmers would also benefit from the improved rainfall, he said.
6. As other experts forecast the onset of better rainfall •patterns for the country, this bodes well for the local agricultural sector, agribusinesses and food companies, which will realise improved profit.
7. Along with increased food supply comes a drop in food prices. This will have a positive effect on food •inflation and, ultimately, consumer inflation – a key measure used by the SA Reserve Bank to determine interest rates.
8. Lower food prices will also benefit the ordinary •consumer and those mired in poverty at a time of high unemployment.
9. The improved weather conditions being cited should •increase the size of key agricultural crops, especially mealies, sugar and wheat. The knock-on effect will be in South Africa not needing to import as much wheat.
10. The country will also switch from maize imports to maize exports and increase its sugar exports, resulting in billions of rands in extra export revenue, which should help to reduce the trade deficit.
11. Red Meat Producers’ Organisation CEO Gerhard Schutte said that news of a La Niña event was welcome after two seasons of drought or dry conditions.
12. Schutte said that a recent survey showed the local female herd contracted by up to 13% because of the drought – and emerging red meat farmers had sustained even greater

losses.

13. Sihlobo said a key issue had to do with the financial status of farmers following the drought, as there were concerns that the funds available to farmers could limit plantings in the coming season.
14. He said food prices were likely to stay high until at least July 2017, which would be the main month when the next maize harvest would take place.
15. “Food prices are going to stay elevated,” he said.
16. “Usually, South Africa exports billions of rands worth of maize, but because of the drought, this has reversed – the country has had to import about R14 billion worth.
17. “A better maize harvest will provide relief to the economy as a whole and will reduce capital outflows to pay for -imports,” Sihlobo said.
18. He added that suppliers to the agricultural sector of goods such as fertiliser, and seed producers, as well as agricultural cooperatives and food companies, had all been hit hard by this season’s drought.
19. “Food companies such as Pioneer Foods and Tiger Brands have been under pressure because of the drought and its resultant higher input costs, and because they had to import more foodstuff,” Sihlobo said.
20. Richard Nicholson, economic research manager at the SA Cane Growers’ Association, confirmed that the La Niña event was expected to bring high rainfall.
21. “After a prolonged drought, rainfall will be -welcome ... The right amount of summer rainfall will have a positive effect on the crops, bearing in mind that floods can be detrimental too,” he said.
22. Tongaat Hulett CEO Peter Staude said that, with the weakening El Niño and the strengthening La Niña, the company was hoping for a wet summer. It grows sugar cane in South Africa, Zimbabwe and Mozambique.
23. South Africa produced 1.63 million tons of sugar in the year to March 2016 – the lowest since 1994/95, and down 22% on the previous year’s 2.1 million tons because of the drought.

24. For the year to March 2017, local sugar production is set to decline by a further 6% to 1.54 million tons – which would be the lowest crop since the 1992/93 season.
25. In its latest seasonal climate watch, the SA Weather Service said that El Niño was slowing down, fast.
26. “There is a possibility for the development of a weak La Niña towards late spring through to the coming summer season. Despite the fact that current climate conditions and most of the forecast models are indicating the tendency of a warmer and drier winter season, the confidence in the forecasting systems is marginal,” it added.
27. “There are chances for above-normal rainfall conditions over the western and northeastern parts of the country for the winter season,” said the SA Weather Service.
28. “Minimum and maximum temperature forecasts show a tendency of warmer-than-usual temperatures over the country, particularly over the northeastern part during the midwinter season,” it said.
29. The Bureau of Meteorology in Australia – known for its expertise in tracking El Niño and La Niña events – is forecasting a 50% likelihood of a La Niña event forming later this year.

Appendix 4

We must act now to turn the drought crisis around

Voices

Jul 23 2017 06:51 Lindiwe Matshegka

1. South Africa is in the middle of a water crisis.
2. You would assume that, after repeated warnings over the past few years by industry stakeholders, we would have changed our attitudes, heeded the call to preserve water and perhaps have invested in future-proofing the water needs of the country.
3. You would be wrong.
4. Unlike electricity generation and supply, which requires copious investment of capital by power utility companies, water is considered to be a free resource that can be tapped from a river, the sea or a borehole.
5. Even better, rainfall is the primary source of this resource.
6. Throw consumer and rights groups into the fray, and the clamour of entitlement to this resource grows loud.
7. Is it really necessary, then, for consumers to start paying tariffs for a resource that is considered to be a basic right?
8. These attitudes typically sum up the mindset of South African water consumers.
9. But this is already changing, especially in the wake of a crippling drought in the Western Cape.
10. Sadly, though, we are learning the hard way.
11. For perspective, each person in the Western Cape is currently allowed to use only 87 litres of municipal water a day for drinking and washing.
12. Having used 243 million cubic metres of water in the past year, the province now has slightly more than 160 million cubic metres of usable water left – representing a deficit of 84 million cubic metres of the resource that must sustain the province until the next rainy season.
13. Simply put, the Western Cape will require three consecutive years of above average rainfall to fully recover from this drought.

14. The severe rationing of the water supply in the Western Cape and other parts of the country is an indicator that water shedding in South Africa is a reality.
15. And it could fast become a regular occurrence.
16. In some townships such as Gugulethu (where I come from), Langa, Nyanga and Khayelitsha, years of progress in the delivery of piped water, which has contributed to improving the quality of life and to poverty reduction, may be undone by a double whammy of a possible introduction of higher tariffs coupled with drastic water rationing.
17. While this crisis is largely confined to the Western Cape right now, rising water demand across the country – the result of an increasing population and the growth in the number of households using flushing toilets – makes this a national crisis.
18. Further compounding this is the rapidly depleting supply of fresh water – a challenge confronting the country's economic hub, Gauteng.
19. The province has a massive population whose livelihoods are dependent on water-intensive industries, yet it barely has a source of fresh water.
20. The bulk of the water consumed in the province is drawn from the Maluti Mountains in Lesotho.
21. Added to this is the threat of ageing infrastructure and the widespread prevalence of acid mine drainage across the Vaal Reef, which means the bulk of water in Gauteng is highly contaminated.
22. Investing in the country's water security is certain to become a huge challenge, especially as the crisis becomes replicated across other mining towns in Mpumalanga, Limpopo and North West.
23. Instead of focusing on the doom and gloom, this should be a rallying cry for consumers, business and civil society to invest in modern infrastructure and also help change consumer attitudes towards this resource.
24. Although the regulatory framework requires work, existing legislation is a sufficient springboard to galvanise action.
25. Policies such as the carbon tax also offer the private sector the required impetus to be innovative in how it invests in infrastructure and saves water – after all, the tax is aimed at encouraging sustainability and this should, in turn, create an environment for new industries.
26. Most of all, though, I would argue that the solutions to preventing a full-blown and nationwide water crisis are great opportunities for entrepreneurs with the innovation and

drive to build world-class water supply and treatment infrastructure.

27. *Matshekga is the IDC's divisional executive for agroprocessing, industrial infrastructure and new industries*

Appendix 5

The borehole helped, but funding is needed to save town from day zero

News

Poloku Tau 2018 -01-02 09:43

1. More money is needed to drill additional boreholes in a bid to save the drought-stricken Beaufort West from day zero, but there is enough to take residents of the Karoo town through the festive season.
2. This was said by the humanitarian organisation Gift of the Givers Foundation, whose R6 million borehole project could not manage to yield the intended one million litres of water a day.
3. This amount of water was needed to make up for the same quantity that has been flowing into the system from the now completely dry Gamka Dam, which is the town's main water source.
4. Beaufort West is one of the Western Cape towns severely hit by the drought, leaving its 34 000 residents desperately praying for rain daily. Cape Town has already announced that it may hit day zero from as early as April and, just like Beaufort West, has made an appeal to residents to use water sparingly.
5. Meanwhile, Gift of the Givers' Dr Imtiaz Sooliman said, after hoping for their five boreholes to yield two million litres of water daily, it did not happen due to concerns by their specialist.
6. He said the hydrologist, geologist and palaeontologist who has been heading the project – Dr Gideon Groenewald – raised concerns after “finding that the drought in Beaufort West was far more severe than anyone has comprehended”.
7. “In the White Horse area, where we found more than one million litres of water a day, Groenewald – using his scientific knowledge – decided to drop the production to 300 000 litres a day in the best interests of preserving the aquifers. If the aquifers get destroyed the entire system will collapse. If the aquifer is preserved the arrival of just 50mm of rain will give us large volumes in just three days,” Sooliman said.
8. He said they were looking at expanding their project in the new year but needed funding to do this.
9. “In the new year there is another site we are going to look at about 1km away from our existing borehole. We are confident that from that new source we can get several hundred thousand litres a day but once again will pump out only 200 000 litres daily in the absence of rain to preserve the aquifer,” Sooliman added.
10. “Then there's a site at Walker Dam where we already found 350 000 litres a day. Here again, we can safely pump 200 000 litres daily to preserve the aquifer on the absence of rain.

11. "There are other sites we can access but we will now need active financial support from government to assist in these initiatives ... there has to be greater investment in drilling more boreholes and putting additional water pipelines and other infrastructure."
12. The town's mayor, Jacob van der Linde, said things were not too bad but urged residents to continue using water sparingly.
13. "We're coping at this stage but we must just tell people to use the water sparingly. We have enough water in the storage for the next few days and we have Jojo tanks on standby which will be filled for people to get water from in case something goes wrong," he said.

Appendix 6 List of codes from Thematic Analysis

84	production (capital)/ industry	
85	economic jargon	x
86	recycled water	x
87	crops benefit/exploit	x
88	use resources	x
89	migration	1
90	drought relief	x
91	budget speech	x
92	meat industry	1
93	farm workers seasonal work/ temporary	x
94	contingency reserves	x
95	civil unrest	x
96	manufacturing (puree, canning etc)	2
97	social grant income	x
98	women	x
99	fuel price	x
100	chaos	x
101	ONGOING drought	x
102	humanitarianism	0
103	industry stakeholders responsibility	1
104	save water	x
105	future-proofing water	x
106	free resource	x
107	water as basic right	x
108	consumer attitudes	1
109	poverty	x
110	tariffs	x
111	population growth	x
112	contamination	x
113	investment	x
114	mining	x
115	legislation	x
116	policies	x
117	carbon tx	x
118	globalisation	x
119	health infectious disease	x
120	environmental assessment impact	x
121	cosatu	x
122	rich vs poor	x
123	climate change	x
124	more money/funding required	x
125	festive season	x
126	small town	x

170	responsibility
171	environmental affairs
172	money not a solution
173	high growth
174	resilience
175	achievement
176	reduction in consumption
177	Cape Town international
178	international tourists
179	hospitality
180	hotels
181	water footprint
182	corporate solutions in reduction
183	safe areas
184	business protection zones
185	high level meetings
186	high-level meetings
187	opposition
188	reality
189	leaks
190	water conservation
191	water scheme
192	budget speech
193	good news
194	relief
195	effects of disaster