ZOOMING IN: AN ETHNOGRAPHIC STUDY OF VISUAL JOURNALISM FOR SMARTPHONES - JOURNALISTIC ROLES AND ROUTINES AT SOUTH AFRICA'S LARGEST GRAPHICS UNIT, GRAPHICS24

A thesis submitted in partial fulfilment of the requirements of the Master of Arts Degree in Journalism and Media Studies

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February 2018

ACKNOWLEDGEMENTS

I would like to thank my supervisor, Professor Harry Dugmore, for his incredible patience and guidance with this thesis. He offered much valuable advice and guided me towards deeper insight while I was formulating my topic and throughout the process of research, writing and editing. He made me think in ways I have never done before. I would also like to thank all my study participants, who selflessly offered their time for interviews and discussions. Thank you all for sharing your experiences with me and the world. Thank you to my mother for the encouragement and the use of her house when she was on holiday so that I could finalise the last chapter. Nothing like a very quiet retirement village to help me concentrate! And then, thank you to my spouse, JR, for his immense patience and encouragement, I don't think he realised how much time this project would take out of our together time, but we got through it and we are still happily married!

DECLARATION

I hereby declare that this thesis is my own work. I have acknowledged all other authors' ideas and referenced direct quotations from their work. I have not allowed anyone else to borrow or copy my work.

Signature: **Date:** 13 February 2018

ABSTRACT

This study examines the changing roles of graphics journalists in the digital era at *Graphics24*, the largest information graphics newsroom in South Africa, in the context of their work for *Netwerk24*, an online news site published in Afrikaans with a strong focus on mobile-first news. The study examines the discursive construction of these new journalistic roles in the digital era where even the core conceptualisation of what journalism is, is being re-examined. It considers external factors affecting the discourse of change, drawing on a hierarchy of influences analytical model, as well as norms specific to the creation of information graphics. Data for this study was gathered by using ethnographic immersion and semi-structured interviews. This study specifically looks at graphics journalists working in a mobile-first environment, and how the pressures of producing information graphics for consumption on smartphones affects their roles. Evidence of two widely differing discourses in the *Graphics24* and *Netwerk24* newsrooms was found. Visual journalists in this study have created a discourse around being distinct "service providers", rather than mobile-first journalists, who do not see the need for full integration in the fast-paced mobile news environment of *Netwerk24*. Word-centric journalists have, by contrast, created a mobile-first discourse. They experience the separateness of the graphics team as a barrier that impedes the creation of good information graphics for mobile phone consumption. Although this is a very localised study in a very particular context, this study contributes to broader thinking in what is a very under-researched field: The changing roles of visual journalists in the digital era and the discursive construction of these roles. The study suggests that even in the digital era where the definition of newsrooms has become much more fluid and less fixed physically, ethnographic methods can still offer a meaningful way to explore journalistic roles.

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CHAPTER 1

BACKGROUND AND CONTEXT

1.1 Background of the research

In the current digital era, when the entire news making process is in a state of constant change, and with news production happening in increasingly "converged" newsrooms, this study aims to identify and describe how some graphics journalists in South Africa perceive and operationalise their roles to produce digital information graphics. This study does this by examining shifting organisational roles in the largest graphics newsroom in South Africa, *Graphics24*, and the interaction of graphics journalists and editors in the production of news information graphics, specifically for mobile phones.

Graphics24 is a standalone division that supplies information graphics (infographics) for publications in the Media24 stable. Media24 is a leading media group in Africa (Media24 2017, Tshabalala 2015). This study focusses on graphics produced for *Netwerk24*, an Afrikaans-language news website, which unites several different Afrikaans newspapers in one online space. I was founding editor of *Graphics24,* in 2010 (I left permanently at the end of 2016, to take up a lectureship in journalism at Stellenbosch University). My experience as editor gave me unprecedented insight into the creation and growth of a centralised graphics newsroom, the first in South Africa, and perhaps even the first on the African continent, and insights into the organisational and role orientation issues that developed over the initial years of operation. This newsroom was created by grouping graphics journalists from previous separate and different newsroom and design backgrounds into one large centralised graphics newsroom.

As the founding editor, initially much of my work revolved around creating a national team of information graphics designers for the Media24 group by bringing together these designers from different publications based in Johannesburg, Cape Town and Port Elizabeth to the new, centralised information graphics newsroom, based mainly in Johannesburg, and a satellite

division in Cape Town. Designers who were based at *City Press*, *Beeld* and *Die Burger* all became part of the national graphics team, *Graphics24.* The initial processes involved practical matters such as moving into new office space, getting software installed and creating some sense of unity among team members, who had followed different reporting lines up to the point of integration. The mandate from management was to create a centralised graphics division with a simple reporting line to the new graphics editor (which was, from inception until 2016, me).

At the point of centralisation (November 2010) there was very little resistance from editors and journalists to the process. In many cases, the opposite was true, newspapers who previously had no direct access to information graphics, such as *Rapport* and the *Witness*, were very excited about the prospect of being able to commission their own information graphics.

Initially the centralisation was successful, resulting in cost-savings and setting in place an efficient production process, delivering a great deal more information graphics to a wider variety of "clients". These "clients" included not only the three newspapers where the graphics team members came from, but also other newspapers and divisions in the Media24 group, including *Rapport*, *Volksblad*, the *Witness*, the Human Resources division, as well as the Naspers Head Office in Amsterdam (*Media24* is a division of Naspers). However, over time, as this study explores, this diversification led to unexpected issues, which partly had to do with questions of where the team members "belong" in the wider news production process and within the institution of Media24. Questions arose as to whether *Graphics24* should remain separate and autonomous or whether team members should reintegrate into the different newsrooms, or whether there should be some other arrangement more convenient to all parties. As part of this, notions of what graphics journalism needed to "do" and what the journalists involved needed to "be" arose, which this study explores.

Graphics24 is funded by its "clients" in Media24. Its budget allocation comes from the different newspapers and websites for whom it creates graphics. All contributors to the budget have certain expectations from the team, generally this means a regular and continual delivery of news or other information graphics. Complicating matters, though, is that *Graphics24* also generates its own, fairly substantial, income by delivering work to clients *outside* the Media24

group. This, arguably, could lead to a point where *Graphics24* could be almost self-sustaining, thus saving its internal clients a considerable amount of money, which in turn is useful at a time when media companies are struggling with falling incomes (Picard 2017, Westlund 2017). But this external role and additional income also introduced a host of challenges in terms of self-conception, loyalties and priorities of time, that this study explores.

1.2 Convergence and divergence: Rapid role transformation in the digital age

The digital era, with an increasing emphasis on immediacy and multi-skilled journalists (Usher 2014, Deuze 2008, Klinenberg 2005), has brought this autonomy and "separateness" of the *Graphics24* team into question. There are many definitions for convergence. A widely-held view is that convergence involves bringing together different technologies, skills and staff members into one newsroom (Zhang 2012, Singer 2003, Larrondo, Domingo, Erdal, Masip & Van den Bulck 2016) to produce news for a wide variety of platforms - from traditional printed media to online media consumed on smartphones and websites, to broadcast journalism. Convergence influences all aspects of the media system, including structural organisation, which in turn leads to changing working environments (García-Avilés, Kaltenbrunner & Meier 2014). It seemed inevitable that this changing working environment would, eventually, affect *Graphics24*. But the *Graphics24* team seemed to be swimming against the tide. While editor, I noticed and started to deal with growing tension between the graphics team, editors and journalists. There were very different expectations on both sides. Editors and senior journalists within the Media24 group realised the removal of graphics journalists from the newsroom created unexpected problems. There was a longer and more convoluted commissioning process; there was physical distance between designers and journalists; there was a lack of input from graphics journalists during diary meetings or simple day-to-day news work; and there was a creation of an "island" mentality among members of the graphics team, including myself as editor.

Editors and journalists started looking for closer integration again, with some proposing a reintegration of graphics journalists into the newsrooms, if not in terms of management at least in terms of physical presence. This was not unusual in the context of what was happening in newsrooms around the world, and in South Africa, where "convergence" is the new buzzword

in the digital era (Dick 2014, Olausson 2017, Deuze 2008, Klinenberg 2005). Journalists from different specialities and different platforms are increasingly being united into single, multi-platform newsrooms. This happened around us at Media24, yet, *Graphics24* somehow always remained separate from the other newsrooms.

This is not completely unprecedented, Tameling and Broersma (2013) point out that in their study of a converged newsroom in the Netherlands cultural resistance from reporters led to a process of "de-convergence" at *De Volkskrant*, where the print and online newsrooms were separated again after initially being integrated. There is a somewhat similar situation at *Netwerk24*, where (very few) print journalists work only on the printed editions of newspapers. Therefore there is, perhaps, some justification for graphics journalists wishing to remain separate because it has been shown that it is difficult to align the dynamics and culture of the press, radio, television and the internet because of different professional cultures (Lowrey 2002, Larrondo et al 2016). This, in turn, could influence the production of news, which is partially what this study explores. It can be argued that the professional culture in a graphics newsroom is unique in its own right, being an arguably more creative, visually-oriented culture, compared to the more "verbal" word-centric culture in print and digital newsroom (Smit, De Haan & Buys 2014, Lowrey 2002), and therefore, arguably, harder to merge with the dynamics of a "word" newsroom.

Regardless of the above, increasing pressure for reintegration from the editorial side and increasing insistence on autonomy from the graphics side have led to tensions about how *Graphics24* should be organised, what exactly their roles should be, who they should report to and how the graphics production process should work. There was also tension about who should have the final say about design and content issues, a long-running problem in graphics newsrooms, with designers often aiming for more aesthetic appeal and editors desiring more detailed content, produced at a faster pace. Journalists think verbally, graphic designers often think visually (Smit et al 2014, Lowrey 2002). They do not always understand one another's "language" and modes of expression. There was also much debate about where graphics

journalists should fit into the daily news cycle and whether they should attend all or some of the diary meetings.

Also, in very practical terms, there have been issues about where they should sit: Moving back into the main newsroom or separately in their own space?

As this study explores, these seemingly minor issues and the tensions that they create can reveal a good deal about institutional culture, notions of roles, and resistance within a hegemonic set of corporate expectations and norms. The graphics team members had become accustomed to a certain degree of freedom and separation, and wanted to maintain their autonomy to have the final say about what types of graphics they wanted to create and how to organise the creation process in ways that suited them best. They also much preferred being seated separately.

This insistence on its autonomy by the graphics team was not without precedent. The team (under my guidance) followed a model that was in place in many newsrooms around the world, some well-known examples include the *New York Times* (Smit et al 2014, Usher 2014), *The Economist* (Personal discussions with staff members), *La Vanguardia, Grupo Abril* (from Brazil) and *The Guardian*, but there are many others. Shortly after being appointed graphics editor, I visited *Grupo Abril* (then still part of the Naspers group) in São Paulo to observe how their central graphics team functioned (it has since been disbanded due to budgetary constraints). *Grupo Abril* publishes mostly news and lifestyle magazines, but many of their workflow and organisational processes were relevant to *Graphics24* and thus were drawn upon and implemented at *Graphics24*, by me. A particular feature of the Grupo Abril process, still in use at *Graphics24*, is how the commissioning of graphics works. All graphics requests are channelled through the graphics editor, who will then assign those requests to the individual designers and brief them about the project. At Grupo Abril this was a personal process, with journalists, photographers, designers and editors meeting in person to conceptualise graphics. This was not implemented at *Graphics24*, where the process generally relied on email communication, sometimes for reasons of distance, with commissioning newsrooms being in different cities, but mostly for reasons of efficiency and speed. Often this creates a situation

where the commissioning journalist only sees the graphics once they are completed. This can and has led to misunderstandings and unsatisfactory results for journalists, and is one of the many reasons why editors and journalists have recently started to insist on closer cooperation or reintegration, issues that arose regularly in this study. Because the graphics team sit separately from the *Netwerk24* newsroom (and all other newsrooms), there is also a feeling that the graphics editor is not as deeply involved in the news process as might otherwise be the case. He (currently the editor is male) is not "around" when news breaks, nor when editors and designers discuss story ideas, and therefore does not get the opportunity to suggest graphics ideas or participate in the development of news stories on a continual basis. It is not guaranteed that seating plans alone will solve this problem, as Usher (2014) found in her study of a converged print and digital newsroom at the *New York Times*. Despite sitting close together, in some instances print and digital journalists still did not manage to create a meeting of minds.

The *Graphics24* team also appear to have a deeply ingrained conceptualisation of their "clients" as "customers", similar to the situation that Dick (2014) encountered in some interactive newsrooms in the United Kingdom. Does this have an influence on their professional values and role perceptions as graphic journalists because it appears to serve as justification for maintaining their autonomy and a sense of distance from the different newsroom, including *Netwerk24*? This is a recurring theme in this study.

1.3 Redefining roles in the digital era: Institutional paradigms and a discourse of professionalism

Graphics journalists and journalists globally are redefining and refining their roles in a digital era, and, increasingly, a mobile or smartphone era, where more and more news is consumed primarily and often exclusively on smartphones (George-Palilonis & Spillman 2011, Vobič 2011, Graves 2016, Westlund 2013, Westlund 2017). With an increasing focus on news output for smartphones at *Netwerk24,* pressure appears to have increased on *Graphics24* to redefine their organisational structure and roles to become more efficient, to deliver more graphics for use on mobile phones, and to become more directly involved in the daily news cycle. This is partly an

opportunity for graphics journalists to "step up" and embrace the increasing foregrounding of graphics as key elements of news presentation, but also a challenge to their often "backroom" perceptions of themselves as "supporting actors" in a broader process.

There has been substantial scholarship about how technological change has impacted on journalistic roles and journalism's collective identity and place in society (Hanitzsch & Vos 2017). The relationship between technological innovations and journalism has always been one of the core issues in communication and media studies (Vobič 2011) and changes in technology, such as the current move towards presenting news on smartphones, are implicated in changes in journalistic roles and organisation's routines and processes (Vobič 2011). Vobič (2015), in a study of Slovenian newsroom, identifies three periods of journalistic development in the online space in Slovenia, which is very similar to the situation in the *Netwerk24* newsroom. It changed from a time when only one person in a newsroom handled digital news to organisationally and spatially separate online divisions (a position *Graphics24* currently occupies), to, more recently, a fully integrated digital newsroom. The current move to mobile news distribution and social media as news platform indicates a fourth wave of digital news development (Hermida 2013, Vobič 2015), with its own set of implications for newsroom organisation and re-creating or shifting the discourse of professional roles. *Netwerk24* and *Graphics24*, and probably many newsrooms around the world, are still negotiating this road.

Dick (2014) showed how journalistic and organisational norms shaped the production of interactive graphics in the United Kingdom. He found the new "networked" news environment was a strong contributor to the raised status of graphics journalists (Dick 2014), a position *Graphics24* also occupies at Media24, being highly regarded by management. On an organisational level Dick (2017) cites work by only one researcher, Lowrey, who examined the roles of visual journalists in various studies. There is thus a gap in the scholarship that this study aims to help close in a modest way by examining role orientations in one graphics newsroom in South Africa, during this "fourth wave" transition towards "mobile-first" news production.

1.4 A brief historical overview of information graphics and news

Academic attention to newspaper design (and, by inference, graphic design, because there have been very few studies specific to graphic design in news) is a modern phenomenon. Cooke (2005) shows that academics often only referenced design when it was affected by technological changes. The digital era and increasingly converging design forms between print, online and television platforms have led to some academic interest in the visual presentation of news (Cooke 2005). There are still gaps in the literature about journalistic roles in the production of visual news, which is the topic this study aims to address.

Espejo (2016) provides a practical historical starting point for visual news studies by exploring the standardisation of newspaper design since the 16th Century. This standardisation started in Italy with news gazettes designed to resemble the classical style of books, sometimes with engravings as illustrations. This design style spread to Spain, while a different style developed in northern European countries such as the Netherlands, France and Germany, with the introduction of columns in layout for news gazettes in the 17th Century. This style, using columns, eventually spread to England and became the Western standard for newspaper design, still present to this day. In all the above cases design was informed by the desire of publishers to increase the confidence of consumers in their products (Espejo 2016).

Technological changes such as the Industrial Revolution and improved printing presses boosted newspaper publishing with publishers being able to print many more copies, and designers being able to add more pictures (Nelson 1998). This helped lead to the development of the Penny Press and tabloids in the United States and elsewhere, in the early 19th Century. These tabloids were more visual, presenting a popular type of journalism with many illustrations (Nelson 1998). Perhaps this could be seen as the start of modern visual journalism. But until the mid 1950's newspapers were often laid out in arbitrary styles and often were not very neat (Ong 1987). The advent of television led to plunging circulations for newspapers (something that is now being repeated in the digital era) and for the first time in the modern era newspaper editors realised that they had to package their products better to attract readers in the face of increasing visual competition (Ong 1987). The introduction of the Standard

Advertising Unit in 1984 in the United States led to further design standardisation, with the general acceptance of standardised column grids by most US newspapers (Ong 1987).

The increasing use of infographics since the Second World War (Reavy 2003) is an illustration of how publishers paid more attention to visual news in the 20th Century. These graphics were often used to illustrate balance of forces and battle operations. There has again been a resurgence in the use of infographics since the 1980s, *The Sunday Times* in the United Kingdom and *USA Today* being the pioneers (Siricharoen 2013, McPherson 2006, Friendly 2008) of new graphics and design formats. Since the 1980s the use of infographics has expanded all over the world, along with modernist newspaper design becoming popular in the last half a century. Modernist newspapers often function like route maps with large headlines and dominant images or graphics to direct readers through the paper (Lowrey 1999). Knox (2009) shows that since the mid to late 20th Century newspapers dominated by densely packed texts have made way for more visual variety. *USA Today* was the first newspaper in the United States to introduce a full-page weather map as well as many graphics in colour, at its launch in 1982, as well as a daily graphic on the front page. The paper used infographics extensively during the First Gulf War (McPherson 2006). The colourful style adopted by *USA Today* has been emulated by many newspapers (Vines 2002, McPherson 2006) and the 1980s can arguably be seen as the beginning of a new, colourful, visual era in newspaper design, characterised by large pictures and colourful information graphics (McPherson 2006).

Infographics play an important part in the visual attractiveness of a newspaper page (Ghode 2012), and can be powerful tools to inform, educate and empower citizens due to their role in simplifying complicated information (Lott 1994, De Haan, Kruikemeier, Lecheler, Smit & Van Der Nat 2017). There is a strong argument to be made for infographics facilitating understanding. Readers found it easier to recall information from *USA Today*, a colourful, visual newspaper, when it was launched (McPherson 2006), while infographics have been shown to increase political understanding (De Haan et al 2017). Dick (2014) also shows how interactive graphics play a role in informing the public and the functioning of society, just like print and broadcast journalism. De Haan et al (2017) point out that information graphics have become a

storytelling genre in their own right and that audiences have become, in general, more visually literate.

Since the advent of digital media technology in the early 1990s, information graphics have become an even more important tool used by news organisations to fulfil their public interest role (Graves 2016) and to remain relevant in the digital age, where journalism struggles to do so (Newman, Fletcher, Levy & Nielsen 2016) in a digital environment bombarded by visuals. Platforms such as Facebook and Instagram are testament to a general visual turn in the media. Many newspapers now rely on design to improve public appeal (Lowrey 1999a, 1999b, De Haan et al 2017). Information graphics have a distinct ability to attract readers (De Haan et al 2017) and appear to be especially popular among younger audiences (George-Palilonis & Spillman 2011), although, because very few studies have been conducted about audience reception of infographics (De Haan et al 2017) it is difficult to generalise about the target readers and their response to these graphics. De Haan et al (2017) showed audiences value information graphics but most other evidence about the reception of graphics are anecdotal.

1.5 Mobile challenges

The rising interest in infographics in news and increasing interest among readers were some of the reasons for the creation of the *Graphics24* team. Its purpose was to create simple, visually attractive information graphics to help maintain newspaper readership, in print and online, to inform the public sphere and to attract new readers in difficult economic circumstances and against much visual competition. But since these shifts in 2010/2011 there have been further significant changes in news consumption patterns globally, with a clear move towards greater consumption on mobile devices (George-Palilonis & Spillman 2011, Vobič 2011, Graves 2016, Westlund 2013, Westlund 2017). 37% to 42% of people in South Africa already own some form of smartphones (Poushter 2016). The majority of smartphone owners now access news via social networks on mobile devices in the United States, and worldwide (Knight Foundation 2016, Westlund 2017). Despite the high cost of data in South Africa it can be assumed that some of this shift is happening in South Africa too, especially where people have access to work or public library or university/school based Wi-Fi. Newspaper readership is also falling sharply in

most countries and this, too, has been the case in South Africa (Usher 2014, Manson 2017). Audience ranking reports show readers of the top three news websites in South Africa are increasingly accessing news on their mobile phones. *News24* has 6,5 million unique browsers and 61% are "coming into" the News24 site on their phones, i.e. are mobile users; *TimesLive* has 3,6 million unique browsers, with 68% accessing the *TimesLive* site via their mobile phones; and IOL has 2,8 million unique browsers, 50% of whom access the IOL content via mobile phones.

The same trend is apparent for sport readers, with well over 60% using mobile phones, as well as business readers, where more than 50% in general, and in the case of *Business Tech*, 70%, access at least some of their daily news on mobile phones (Moss 2017). It is clear that there will be a point in the not so distant future where almost all news, including information graphics, will be accessed on smartphones in the main, and, for most people, exclusively.

As more people have been moving online and to smartphones to find their news, globally and in South Africa (Newman et al 2016, Moss 2017, Poushter 2016, Westlund 2017), many media organisations initially experimented with rich, interactive information graphics and visualisations which "facilitate explanation through interaction" (Dick 2014: 491) as a way to maintain and grow readerships. Most, including trendsetters such as the *New York Times* (and *Graphics24*), have more recently started to move away from interactive graphics (Tse 2016, Salmén 2017), as news consumption on mobile phones does not offer the same opportunities for data-heavy, interactive graphics. There is still a demand for information graphics on phones, just simpler and smaller graphics (Salmén 2017) because the uptake of mobile devices for news consumption has led to a culture of simply scanning or checking the news, with users not spending extensive time on reading (Westlund 2017) or, conceivably, exploring "data" as much anymore.

It is predicted that mobile internet penetration will reach more than 70% in South Africa by 2020. The current figure is already more than 50% (PWC 2016). Even though many people can only afford relatively limited browsing, and sometimes none at all, because of the expense of access to people in rural communities (de Lanerolle, Walton & Schoon 2017), this is also likely

to change with increasing availability of public W-Fi and falling costs of data. This shift by audiences to news consumption on mobile phones creates a particular set of challenges for graphics journalists. Good information graphics should represent verified and complex information concisely in a visually accessible and attractive way (Cairo 2012), but small screens of mobile phones have demanded an entirely new way of thinking (Wang 2016). It is not as simple as just scaling down the size of a graphic. The type of platform where graphics will be consumed has a clear effect on the type of graphics that can be produced (De Haan et al 2017), with mobile phone screens limiting the type of graphics that can be presented (McNamara 2017). Experience in graphics newsrooms worldwide, including at *Graphics24*, have shown it is not possible to simply copy detailed graphics as they would appear in print or even on large computer screens for use on mobile phone screens. The question is how graphics newsroom will adapt to this challenge.

1.6 Understanding individual journalists and their interaction with journalism institutions

A recurring theme in recent sociological studies of news production in the digital era is the issue of individual empowerment within larger, structural organisational constraints (Stonbely 2015, Usher 2013). The desire by the *Graphics24* team to remain autonomous and separate is a manifestation of this struggle between a small group of individuals, a small work team and the larger organisation and its rhythms and requirements. Having had a great deal of autonomy in their day-to-day work, it is to be expected that some team members might resist changes and attempts to reintegrate into a larger team where their own sense of their individual power might feel diluted.

This and related themes of how journalists relate to, co-create and resist organisational cultures have been researched widely. Initially seminal studies from the 1950s and 1960s, such as David Manning White's analysis in 1950 of the News Editor as primary gatekeeper and Warren Breed's (1955) explanation of social control in the newsroom were valuable sociological studies about the question: "How does news-making work, and in whose interest?" (Reese & Ballinger 2001). White's study was one of the first to present the notion that news is "manufactured" or "constructed" and showed how this process was influenced by structural and organisational

issues. The role of the gatekeeper within the newsroom structure and a theory of social control became prominent (Reese & Ballinger 2001) after these initial studies. Only later did scholars focus more closely on institutional power structures and individual journalistic agency, as well as other external and internal factors and tensions. There is now a sizeable body of research addressing forces that shape the creation of news, often conceptualised as a "hierarchy of influences", including, among others, a range of influences such as the training of, and personal views of journalists right through to the influence of routines and organisation on the production of journalism (Reese & Ballinger 2001).

As is further explored in Chapter 2, in the 1960s and 1970s several ethnographic studies in the United States, cited by Dick (2014) and Stonbely (2015), such as those by Tunstall, Epstein, Golding and Elliot and Schlesinger, then examined questions of organisational constraints. In these studies the power of the organisation was often rarefied and individual agency was held to be deeply constrained. Others explored individual notions of journalistic "professionalism" (emphasising knowledge of the field and for example, developing a wide range of sources and relative autonomy of individual journalists). These studies were influential and opened up continuing research into organisational theory, social control as well as a broad rejection of institutional authority (Stonbely 2015). This recurring theme of understanding organisational constraints versus individual agency (Stonbely 2015) is arguably a key theme of contemporary newsroom sociologies.

Most recently, sociological studies of journalistic roles have identified more nuanced and dynamic frameworks to examine the construction of journalism. Hanitzsch & Vos (2017), in their discussion of the "discursive construction" of journalism, identify four key concepts that allow journalistic roles to be thought about within a discursive framework. These concepts are normative roles (how journalists are expected to meet the needs of the public), cognitive role (the socialisation of journalists within specific structures), practiced roles (how journalists perform their work), and narrated roles (how journalists reflect on their roles). This study will return to these concepts and themes and the Hanitzsch and Vos "process model" in more detail in Chapter 2.

"Convergence" in newsrooms has also been studied extensively. Convergence studies offer insight into how newsrooms integrated different sections and platforms into single teams, meant to work closer together. This has been studied for well over a decade and can be conceptualised as practices that provide synergies between different media platforms within the same media group (Larrondo et al 2017). On a practical level this can be a combination of news staff, technologies and products in one newsroom to enable cooperation among print, online and broadcast journalists (Zhang 2012).

Convergence in newsrooms can be seen as a reaction to turbulent times facing the news industry with falling audiences and revenues and changing habits of consumption (Larrondo et al 2017). This leads to tension in newsrooms (Lowrey 2002, Dick 2014) where different types of journalist are required to work together. There appears to be no studies that have examined the convergence of graphics journalists with regular print and online journalists and how this was organised, and little research has been done into how convergent news operations have affected newsroom practices, roles, and culture (Dupagne & Garrison 2006). This despite research showing that convergence influences all aspects of journalistic roles (Olausson 2016).

1.7 Shifting technologies

Looking specifically at graphics journalists and technology, there are very few studies that explore explicitly and in-depth how shifting technologies impact on graphics journalist's perceived roles, work routines, news values and professional ideology (Reese & Shoemaker 2016). Dick's study (2014) on news values and working practices among interactive graphics journalists confirms this paucity of scholarship. He found that there are almost no studies that consider how graphics journalists think about the creation of graphics, their role perceptions, work processes or routines.

More general in nature, a seminal study by Usher (2014) examined the challenges faced by the *New York Times* in negotiating the changing environment between a print world and an online world. Journalists now need to adjust to a 24/7 news cycle, and an environment of constant, active engagement with readers and others working on the news creation process. This has led to some restructuring of news routines (Usher 2014), affecting not only journalists but also

graphic designers, team leaders and everyone else involved in the production process. Although Usher's study did not look at graphics journalists specifically, she showed immediacy has become the new buzzword (Usher 2014), affecting all aspects of the production process and how newsrooms are organised. How does this impact on journalists' self-perceptions, and their work more generally?

1.8 Graphics norms and standards

The production of visualisations in any newsroom faces similar organisational challenges to those faced by any journalist in any digital newsroom, but also other, specific challenges, which are explored in this study. One of the main reasons for tension is that the production of visualisations can be time-consuming and often leads to clashes in the newsroom because designers need time while editors insist on fast turnaround (Smit et al 2014, Lowrey 1999a). Furthermore, when looking at graphics production for online use, this work can be functionally different to other types of journalism (Deuze 2003), which affects role perceptions and organisational structures.

Contributing to tensions in the newsroom regarding infographics are differing views on standards or norms for graphics. Dick (2017) discusses standards for infographics and points to the growing demand for infographics while in his earlier work (2014), he creates a useful groundwork for exploring working practices and organisation among graphics journalists specifically, drawing on more traditional organisational theory. He examines routines, processes and relationships influencing the production of interactive graphics journalism. He finds that organisational norms shape the selection, production and treatment of interactive graphics but that there is growing confidence and free agency emanating from graphics journalists, despite differing views from "word" journalists. Dick points out that there is room for further exploration and further development of theoretical perspective and case studies, as no clear framework for deciding on what constitutes an interactive graphic (or, one can infer, static infographics for mobile phones) exists, nor have the roles of non-journalists (people who have a graphic design background rather than a journalism background) and their interaction with journalists been studied extensively in organisational terms. Some members of the *Graphics24*

team are from a non-journalistic background and this has produced interesting tensions and complexities in terms of their socialisation as journalists, and their normative and cognitive perspectives and their actual practice. This is in this study.

1.9 Framework

The study will thus draw on, among others, Lowrey, Hanitzsch & Vos, Dick, Usher, Reese & Shoemaker and Stonbely to explore organisational roles of graphics journalists in a key South African news organisation. Hanitzsch's "discursive construction" of journalism and journalistic roles offers an alternative framework to examine the roles of graphic journalists in a digital newsroom. This study will draw on Reese & Shoemaker's (2016) and Shoemaker & Reese's (2014) and Shoemaker, Vos and Reese's (2009) seminal and refined "hierarchy of influences" model to study the factors that shape media content in the digital era, and factors that influence the discourse in newsrooms on graphics journalism. Reese and Shoemaker explore and have explored five "levels" of influence that shape media content, namely the individual level, work routines, the organisational level, the level of social institutions and, finally, the level of social systems prevalent in a particular country. Further analytical guidance comes from Dick (2014), who suggests identifying "interactive norms" in a newsroom, namely whether there is a common rationale to justify the creation of interactives; whether there are routine work processes (organisational norms); and consistency in approaches to data visualisations, norms that are also relevant to infographics.

1.10 Research question

This study explores the question: How are graphics journalists in the largest graphics newsroom in South Africa adapting their roles, routines and work processes to produce information graphics for mobile phones, and how is this impacting on their sense of their journalistic roles? The study does this by exploring organisational roles in the *Graphics24* newsroom and the interaction of graphic designers with *Netwerk24* and how these roles are changing against the background of sharp shifts in the media environment, where many media organisations are moving towards newsrooms that focus on producing news for mobile phone consumption as their primary concern. The *Netwerk24* newsroom operates in the digital era as a mobile-first

newsroom and this affects all aspects of journalistic roles (including visual journalists' roles), as well as structural and institutional organisation.

The following questions feed into the key research question of this study:

1. How does the need to implement mobile-first graphic design affect the process and workflow in the creation of news?
2. How does a mobile-first outlook affect the role perceptions of graphics journalists and how do they reflect on being visual journalists in a digital era?
3. How do graphics journalists organise themselves and how would journalists and editors prefer them to be organised in a mobile-first environment?
4. How does the change from print to smartphone affect the roles of visual journalists?
5. Do visual journalists feel challenged by the mobile-first outlook? Do they understand the reasoning behind the process and support it?
6. How has the mobile-first imperative affected their interaction with other journalists in a converged newsroom?
7. How do they negotiate tensions between the graphics team, editors and journalists regarding the roles of graphics journalists and the organisation of the graphic design team within the larger newsroom? How does this affect the production of news in a digital age?
8. Are there norms to create infographics?

Exploring these questions will allow conclusions to be drawn about visual journalists' role perceptions and performance and create the context for grappling with the main research question.

The study focuses solely on the production of information graphics and not data journalism. These terms are often used interchangeably. Althought there is some overlap in terms of meaning, there is a conceptual difference between the creation of "information graphics" and

the practice of data journalism. The term “information graphics” in this study refers to the visual display and clarification of bits of information, whereas “data journalism” generally refers to exploring very large amounts of data to find hidden stories among the complexity, and then telling these stories in simple ways, sometimes by using infographics (Bradshaw 2012). The *Graphics24* team members are, mostly, not concerned with data journalism. Very occasionally the team will be asked to visualise the results of data journalism research conducted by investigative reporters but this does not happen often. This is an insight I have from my experience with the team. Their main function is the visual display of information to add value to stories or to tell full stories in a visual way, the creation of simple infographics. This study, therefore, examines a group of journalists producing infographics in a mobile-first environment, focussing on both how they conceptualise and discuss their role as journalists, and on how they have established and adapted their work routines to accommodate the new reality of digital media consumed increasingly only or mainly on smartphones.

It is hoped that the findings may help build understanding of the organisational issues at play in converging newsrooms in the digital age where different teams with very different cultures need to work together in an increasingly mobile-first environment (Brennen 2013). This may assist other newsrooms to adapt their work routines for a mobile-first environment and help resolve some tensions that might exist between graphics journalists and newsrooms, as well as provide some ideas for further research into organisational and structural issues in converged newsrooms in the digital era. It is also hoped that the research may inform and enrich, and provide more depth to thinking about journalism as discourse, and the discursive construction of journalistic roles.

1.11 Outline of chapters

This thesis consists of five chapters.

This chapter outlines the need for this study and the broad context and historical background against which it was conducted, drawing on some of my own experience and observations as founding editor of *Graphics24*.

Chapter Two outlines the theoretical framework informing the study by reviewing relevant literature. Current organisational and institutional theory relevant to digital journalism and convergence is discussed and the study of graphic journalists is located within a wider body of organisational theory and studies on graphics journalism. Various analytical models are explored, drawing on Reese & Shoemaker's hierarchy of influences model, as well as aspects of Hanitzsch & Vos's "discursive construction of journalism" model, and Dick's suggestions for graphics norms.

Chapter Three outlines and justifies the research methodology this study employs, namely qualitative research, with particular emphasis on the two main ethnographic methods used, namely participant interviews and observations. The chapter discusses practical and ethical considerations and suggests that, even in the digital age, where many newsrooms are now networked spaces without clear locational limits, there are still physical newsrooms where people produce news, as is the case in this study. There is thus still room and, indeed, demand for ethnographic studies of newsroom in the digital age to explore changing modes of news creation to answer the oldest questions in journalism studies: What shapes the actual journalism that appears in public?

Chapter Four describes, discusses and analyses the data generated during the research process, including data gathered during the observations and in-depth interviews. The chapter explores the tensions between the graphics team and the main *Netwerk24* newsroom and shows how tensions between "word" and "visual" journalists arise because of very different role perceptions and what the chapter suggests are two fairly distinct and discordant discourses of journalism.

Chapter Five summarises the main findings and concludes that graphics and word journalists in this study do not perceive the roles of graphics journalists in complementary ways. There are, at least for the work space focussed on in this study, no clear and shared understandings of the roles of graphics journalists in the digital era. The study reflects on what import this might have for newsrooms elsewhere, other scholarship and the broader debates about newsroom cultures, and journalism roles.

CHAPTER 2

THEORETICAL FRAMEWORK

2.1 Introduction

A great deal of research in recent decades has focussed on theoretical and empirical understanding of journalistic roles. This chapter reviews existing literature and formulates a theoretical framework for the study based on current theories. Examining the roles of journalists is central to the understanding of journalism's place and identity in society and the way journalists "define their relationship with society helps them give meaning to their work and enables them to justify and emphasise the importance of their work to themselves and others" (Hanitzsch & Vos 2017: 115, citing Aldridge & Evetts & Zelizer 1993). However, the digital era has brought about many challenges for journalists, with issues such as convergence and digitisation leading to a breaking-up of traditional "professional" boundaries (Olausson 2017, Deuze 2003). Changing consumer behaviour, greater levels of audience participation and interaction, as well as declining revenues (and retrenchments of journalists) are also influencing the discourse about journalism in many countries, and notions of journalistic roles (O'Sullivan & Heinonen 2008).

In addition, journalistic roles conceptions have also been influenced by changing news values. Some researchers have started exploring this. Usher (2014) argues that these new news values, guiding journalism and journalistic roles in an age of 24/7 news, now also include (in addition to "old" values such as objectivity, telling the truth and monitoring power) immediacy, interactivity and participation. They have not replaced the "old" values, but the new values have resulted in a restructuring of news routines (Usher 2014), and the ways journalists think about themselves, and understand their role in society, i.e. the broader area of journalistic roles.

Further complicating a study of journalistic roles in the digital era is the rapidly changing nature of journalism itself as a set of work processes and the means by which society informs itself about what is going on. Therefore theorising about journalistic roles becomes more difficult when the concept of journalism itself is changing (Deuze 2003, Reese 2016). In an era where everyone can be a journalist, the lines between professional journalists and others who can spread information have been blurred (Olausson 2017). Anyone can now "do" even graphics journalism due to the increasing availability of sophisticated free programs online to create information graphics. In this context, what does it mean to be a journalist? And, more specifically, a visual journalist? How should journalists perform their roles in a world where they are no longer the only voice? What do they perceive their roles to be? Journalists are now "one among many voices in public communication" (Olausson 2017: 62, citing Deuze 2007). How do they negotiate these changes?

There is much discussion in academic literature about how notions of journalistic roles have been affected by these changes (Olausson 2017, O'Sullivan & Heinonen 2008, Usher 2014, Larrondo et al 2016). There is now an assumption that all journalists, which can be assumed to include graphics journalists, are compelled to reinvent their professional roles and refine their own sense of these roles (Olausson 2017). This is not unique to South Africa or to "word" journalists. For example, speaker after speaker at the Malofiej25 Infographics World Congress in Pamplona in March 2017 (which I attended) discussed the imperative for information graphics teams to produce more graphics more quickly in the digital era, specifically for mobile phone consumption. This pressure, partly induced by changing technology, audiences on mobile phones and audience fragmentation, has given rise to the main research question in this study, i.e. how do graphic journalists at *Graphics24* adapt their roles, routines and work processes to produce information graphics specifically for mobile phones in a new, networked environment, and how has the mobile-first imperative affected their interaction with other journalists in a converged newsroom and the performance of their journalistic roles? In addition, or allied to this question, is how does this affect their role perceptions and how do they reflect on being visual journalists in a digital era? And how do they negotiate tensions

between the graphics team, editors and journalists regarding the organisation of the graphics team within the larger newsroom?

Previous studies have demonstrated that there has often been tension when journalists from different specialities or fields, especially graphics journalists and print journalists, who are two very different subgroups, are suddenly required to work together in centralised newsrooms (Usher 2014, Vobič 2011, Vobič 2015, Dick 2014, Lowrey 2002). This is a central contextual issue in this study.

It can be argued that the most unsettling set of processes in journalism in the digital age for journalistic roles has been work routine convergence, which follows from changes to the way audiences consume journalism (Anderson, Bell & Shirky 2012, Usher 2014, Larrondo et al 2016). The era of neatly-compartmentalised job descriptions are rapidly shifting. Journalists must now be multi-skilled and flexible to remain employable (Olausson 2017, Larrondo et al 2016) because of the pressures of the new networked environment, shifting technologies, new news values and increasing demands for immediacy. In the case of visual journalists this means learning new design programs and re-evaluating the entire production process when creating graphics (Dick 2014, Wang 2016).

Deuze (2008) differentiates between two types of convergence, namely the convergence of media industries, referring to the establishment of multimedia newsrooms and integrated news companies, i.e. the coming together of different subgroups of journalists in one newsroom; and the convergence of media production and consumption, referring to the increased use of consumers as co-creators of news. The creation of multimedia newsrooms, where different news platforms and different journalistic subgroups are integrated in one newsroom, can include radio, television and print (Deuze 2008), or, as in the case with *Graphics24*, graphics journalists, video journalists, print or word journalists and photographers. Studies of integrated newsrooms, including those involving “word” and “picture” people (descriptions coined by Lowrey 2002), found one of the biggest obstacles to seamless integration was a kind of “cultural

clash" because of different normative outlooks from within each subgroup (Lowrey 2002, Smit et al 2014, Lowrey 1999b). Print reporters often distrust online reporters, television journalists sometimes distrust print reporters (Deuze 2008), and one can infer, visual journalists might distrust "word journalists" and vice versa. Furthermore, it is difficult to align the culture and dynamics of different journalistic role types in one newsroom because they have different journalistic styles, routines, values and speeds (Larrondo et al 2016).

Converged newsrooms are, as predicted by Anderson et al in 2012, immersive and unstable environments, where journalists need to continually adapt work patterns in an era of continual engagement. Specialists, such as animators or graphics journalists need to remain up to date with technological changes and there is much more collaboration than ever before, with other journalists or specialists. This has also affected physical spaces. Klinenberg (2005) illustrates this in the early years of the 21st Century, with his study of *Metro News* that shows how newsrooms changed physically, in terms of where people would sit and the free movement of people working on different platforms between the platforms (for example from print to television, radio and internet). Klinenberg shows how journalists became flexible, multi-skilled workers, although many complained about what was, in effect, additional workloads. For some journalists, this is a source of frustration because they perceive the new environment as forcing them to take on new responsibilities, deliver more under ever-tightening deadlines, which, they believe, impacts on the quality of their work. (Klinenberg 2005).

Convergence also brings up the question of old "habits" that are hard to break. Ryfe's (2009) study of the digital transformation of a metropolitan newspaper in the United States, shows clear evidence that despite strong efforts to change certain aspects of news reporting, it failed because of deeply ingrained habits left over from print-centric times. This is exacerbated by the pace of change. Usher (2014), for example, shows in her study at the *New York Times* that new news routines are still being crafted in the digital age and many newspapers and media organisations are continually having to implement changes in their newsroom. This is also true for *Netwerk24*, the main client of *Graphics24*, the subject of this study.

2.2 New news values

Media work is never performed in a vacuum and the cultural, political and institutional context will always affect how journalists perform their roles (Paterson & Domingo 2008), and also how they think about and discuss their roles. Similarly, Cooke (2005) shows that design is also influenced by social forces, that is one reason why there appears to be increasing similarities between design for websites, newspapers and television news programmes. Designers appear to copy popular trends within their field and are influenced by some elements of popular culture. The current digital context is a completely different environment from the time when the media mostly consisted of print and broadcast media in terms of news values. Usher's (2014) finding in her study at the *New York Times* that news work is now driven by new values of immediacy, speed and participation, is, of course, not new in journalism. Immediacy and "breaking news" have always been part of journalism. When technologies such as radio and television became popular they put increasing urgency on newspapers (Usher 2014). But Usher (2014) asks an interesting question, relevant to this study: What pressure does "immediacy" in the *digital era* put on journalists? Her observations show that immediacy appeared to dominate all news work at the *New York Times*. The website was constantly being updated, with even strong print stories simply disappearing "into the netherworld of small headlines on the business and national pages of the web site" (2014: 9), all for the sake of constant updating. She argues that immediacy has become part of the normative culture of journalists.

This view is echoed by other studies. There is now a non-stop, always on, "networked environment" (Reese 2016) where high-speed communication technology has brought about tremendous changes to the speed of information distribution and the digital ecology of news (Olausson 2017). Anyone with access to this networked environment (the internet) can demand access to information at any time. Usher (2014) argues the question that arises from this is: Can journalists still tell their stories and shape their narratives by themselves, or does the speed of production and the "pace of the story and the felt demand for constant churn destroy journalists' control" (2014: 11)?

This is a very interesting question, as the issue of control and individual agency is something that has always interested scholarship into journalistic roles. Early sociological studies of newsrooms and the making of news emphasised the presence of social control within institutions on news work, while recent studies appear to point to the exercise of increasing individual agency *because* of the new networked environment (Some of these studies are discussed below). Usher's (2014) study appears to show two sides to the networked environment, where the pressures of speed and immediacy seem to both eliminate and increase journalists' control of their work to a certain extent, while others (Stonbely 2015, Cottle 2007) show the age of the internet allows for more individual agency and more individual decision-making processes.

2.3 Journalistic roles

As has been suggested above, convergence has affected every aspect of journalistic roles. Before discussing the key theoretical framework employed in this study, focussing particularly on Shoemaker and Reese's (2009, 2014) hierarchy of influences model and Hanitzsch & Vos's (2017) discursive construction of journalism model, it is useful to review scholarly debate and previous empirical work into the roles of journalists, and what constitutes these roles. Hanitzsch and Vos argue "journalistic roles are conceptualised as discursive constructions of journalism's institutional identity, and as a struggle over discursive authority in conversations about the locus of journalism in society" (Hanitzsch & Vos 2017: 115).

This approach is useful at a time of great technological change and ongoing discussions about journalism's "place" in society. This study also reviews and draws from some studies that examined the roles of visual journalists specifically, chiefly from Lowrey (1999a, 1999b, 2002) and Dick (2014). There are, however, very few studies specifically examining the roles of visual journalists (De Haan, Kruikemeier, Lecheler, Smit & Van Der Nat 2017).

In this chapter an analytical model will be suggested that takes into account the exercise of individual agency, personal reflection and, more specifically, the discursive construction of journalistic roles, a model that seems appropriate to the digital age. The model also takes into account the external factors that affect the production of news as suggested by a hierarchy of influences model. Paterson (2017) cites Ryfe (2009), among others, as researchers who used a theoretical model that shifted from "organisational determinism" to one looking at increasing individual agency, while Hanitzsch & Vos (2017) and Zelizer (2017) provide models for examining the discursive construction of journalistic roles that also foreground individual agency.

2.4 The 1950s to the 1970s

Early sociological studies into the organisation of news work and "newsroom cultures" of the 1950s, when news work was very different from what it is now, offered early insights into the "construction" of news at a time when the "boundaries" of journalism were relatively easy to define. But are these traditional theoretical frameworks satisfactorily helping with the examining of journalistic roles in the new media landscape (Sjøvaag & Karlsson 2017, Reese 2016)? Has the current media environment necessitated more sophisticated theorisation because the more predictable, stable news environments from the past have made way for a new and much more fluid environment (Olausson 2017, Reese 2016, O'Sullivan & Heinonen 2008, Anderson et al 2012, Cottle 2007)?

The 1950s was the era when the theory of "gatekeeping" became a popular model in examinations of news work. Reese & Ballinger (2001) refer to the two classic studies that established this tradition of media sociology, White's "The 'Gatekeeper': A Case Study in the Selection of News" from 1950 and Breed's (1955) "Social Control in the Newsroom". White examined the idea of a News Editor, who came to be known as "Mr Gates", as gatekeeper and what his personal reasons were for rejecting or accepting news items. Breed considered how the processes at work in a newsroom socialise reporters to follow policy when they fulfil

gatekeeping roles. Both studies examined the idea of individual agency within the restrictions of a larger organisation (Shoemaker, Vos & Reese 2009) and examined the news construction process. This helped frame many subsequent studies (Shoemaker et al 2009). White argued: "An editor sees to it (even though he may never be consciously aware of it) that the community shall hear as a fact only those events which the newsman, as the representative of his culture, believes to be true" (Reese & Ballinger 2001: 648).

White's study was ground-breaking in its focus on the decision-making power of particular individuals as gatekeepers, influenced by cultural and other factors. Later studies increasingly started focussing on the power of the organisation (Cottle 2007) in the gatekeeping process. Breed's study showed how newsroom policy is enforced in an indirect way by editors creating "equilibrium" and harmony (Reese & Ballinger 2001: 649). He introduced the question: "How does the organisation work to produce acceptable news?" (Reese & Ballinger 2001: 652). Breed's study showed how journalists absorb the policies and procedures, stated and unstated, of the newsroom in their construction of news (Reese & Shoemaker 2016). Lowrey (1999b) suggests that these early studies showed that individual journalists suppressed personal values and embraced professional values to serve organisational routines, and routines then largely determined the content of the news product. Stonbely (2015) also shows how these early studies were concerned with organisational structures. These studies looked at organisational rules and norms, "the systematic network of norms which control and order the behaviour of the participants in organised group activities, or, were about, alternatively, 'the study of social control' " (Stonbely 2015 citing Young and Hughes). Sociologists at the time argued that news organisations do not simply report the news of the day, but "produced a standardised product that met the rationale of the organisation", news was influenced by institutional policy (Stonbely 2015, Paterson 2017). Stonbely (2015) points out that this was a radical finding, it showed, for the first time, that news was produced for profit, within organisational and institutional limitations that affected the news that was produced. This was also the first time when researchers argued that journalism was being "produced" (Stonbely 2015), a key concept that continues to inform theorising journalism studies.

By the 1960s and 1970s the view that news was also influenced by ideological interpretations became stronger, and studies showed how those interpretations helped shape the way the news looked (Paterson 2017), especially during the Vietnam War when there was a breakdown in social consensus in the United States (Reese & Ballinger 2001). Reese (2016) cites a group of studies from the 1960s and 1970s into how news was produced as classic examples of newsroom sociology that showed how news was an organisational product "that had to be socially constructed" (Schudson 1989, Reese & Ballinger 2001) based on outside factors such as ideology and the greater social system. These studies included Edward Jay Epstein's "News from Nowhere" (about network television news), Mark Fishman's "Manufacturing the News", Gaye Tuchman's (1978) "Making News" (about local newspapers), and Herbert Gans's "Deciding What's News" (about national news magazines and television). Tuchman (1978) explored questions of objectivity in American newsrooms and found that news workers often used procedures as a way of protecting themselves when making important decisions about news value. Institutional culture and policy were important in these ritualised decision-making processes. But the 1970s was also an era when the news making process and the presumption that gatekeepers reflected certain cultures, were increasingly being questioned (Reese & Ballinger 2001). This culminated in three major perspectives that Schudson (1989) calls economical, culture-logical and sociological. The political economical approach examined the system-supporting character of the news and financial control of newsroom. The culture-logical perspective looked at the links between news and culture, a focus on broad cultural symbols and systems, regardless of organisational and occupational routines (Schudson 1989). The sociological approach often consisted of observational studies examining how news was produced within organisational structures (Reese & Ballinger 2001).

Reese (2016) points out that studies from this time served for a long time to help anchor an understanding of how news production worked. It was generally accepted that news was an organisational product that was constructed within a certain ideological framework.

Despite their limitations in terms of a seeming over-reliance on institutional culture and ideology, these early studies are useful because they introduced the concept of gatekeeping and started, in simple ways, examining some of the external and internal factors affecting the news making process. But these now traditional or mainstream sociological theories looking at gatekeeping roles within power structures do not, now, appear to offer satisfactory frameworks in the new media landscape (Reese 2016, Sjøvaag & Karlsson 2017). A common theme in these earlier sociological models is the issue of social control versus individual agency and a seeming acceptance that social control was a deciding factor. These early studies were useful in introducing methodological and theoretical innovation into the field (Sjøvaag & Karlsson 2017) and preceded many ethnographic observations of newsrooms that helped reveal patterns of professional practice that were not seen before (Sjøvaag & Karlsson 2017). The question many of the studies started to address was what other forces shape the media and the media's message (Reese & Ballinger 2001).

2.5 Organisational dynamics vs individual processes

Usher (2014) argues that earlier studies focussed mostly on organisational dynamics and not on individual processes, leaving an initial gap in the literature regarding individual processes, thoughts and actions in the production of news. There was also a lack of theory to explore these individual processes, thoughts and actions. Many of these early studies, with the possible exception of "Mr Gates", were mostly concerned with the effects of the larger routines and policies of news organisations and not with the individual experiences of journalists (Usher 2014). These studies were concerned with questions of order, predictability and routines (Cottle 2007), and helped to understand the constraints placed on news work, but they did not show how individuals might moderate these constraints (Usher 2014). These studies focussed on the "determining influences of organisational contexts" and into the 1980s these studies focussed on the organisational, bureaucratic and professional nature of news production (Cottle 2007: 2-3). They helped answer questions about how news was "subject to temporal routines, how newsroom layouts were organised spatially, and how news processing was

organised in relation to a newsroom division of labour, corporate hierarchy and professional cultural milieu, all became basic building blocks to understanding" (Cottle 2007: 3).

Stonbely (2015) argues that although these early studies placed much emphasis on the constraints of the organisation, there was always some sense of autonomy, informed by the reporter's desire to maintain professional autonomy, which is a key part of the normative roles of journalism as socialised through training and workplace experience. She cites Tuchman's (1978) study showing how jealously some reporters would guard the contact details of sources.

The question of autonomy or agency is a particularly interesting one in the digital era, as some scholars, such as Usher (2014) and Olausson (2017), have argued that there is now more opportunities for journalists to exercise agency, thanks to the digital revolution.

Cottle (2007) in particular argues that, in the face of a fast-changing news environment, it is necessary to update past findings on news production processes. He argues that in older studies, ideas of individual journalistic agency and practice often became lost in theory about bureaucratic and organisational patterns. Paterson (2017) cites a study by Ryfe (2012) that especially helped shift the discourse about convergence in the digital era from technological or organisational determinism to an approach that focuses on human agency and the ways news workers adapt to the new challenges in their newsroom. Ryfe (2012) showed in a comprehensive ethnographic study of American metro newsrooms that in many ways journalistic practices have not changed from the print era. Journalists still collect and write news in the same ways, but there are increasing signs that individuals now somehow mediate restrictions and in the process manage to exercise a sense of autonomy, often thanks to digital changes, which in many newsrooms leave individuals with more decision-making power (Usher 2014, 2013).

In Usher's (2013) study on *Marketplace*, an American radio show, she shows the challenges faced by *Marketplace* are similar to all news production, from scheduling and time pressures to

structural issues. She found that restricting structures were linked to the organisation and time, and structures that allowed more individual agency were linked to the ability to introduce new routines into the news work by using new technology, which includes the internet. The actions of journalists, in other words, showed the exercise of more individual agency than seen before, due in part to the rise of the internet. She also found a "recursive relationship between agents and structure as agents understand and shape organizational identity" (Usher 2013: 808). She cites some literature that addresses the relationship between organisations and individual agency. She refers to studies by Steensen of a Norwegian newsroom that attempts to bridge the gap between structural and individual perspectives; and Kaplan who recognises the importance of understanding how news organisations and journalists adapt to change. According to Usher these scholars "identify the need to understand the interaction between the structures of news work and journalists' experience" (2013: 809). She highlights a particularly interesting example at *Marketplace*, to compare what journalists think they can do with a story as opposed to what they can actually do in reality. A story on huge losses at Bank of America led to spirited discussions in the newsroom with many questions asked, but the story that finally ran only answered a few of these questions because of structural constraints such as time and sources.

Stonbely (2015) also cites Cottle's (2007) identification of "orthodox" ideas from past studies that he thinks no longer applies. Two of these are the over-reliance on journalistic routines because of an overemphasis on organisational constraints, which in turn has led to the neglect of journalistic agency; and the perception that news workers are relatively homogenous in terms of internalising institutional policy, whereas in the digital era there appears to be more reflexivity among news workers, as Usher also found. Ryfe (2009), for example, also found that journalists employed individual agency in the face of a direct order from a superior to write certain types of stories by simply not doing it because it "problematized the routines that reinforced their self-images as good reporters" (2009: 269). Stonbely (2015), like Usher (2014), believes the widespread adoption of technology, specifically the internet, enables individuals,

including journalists, to speak out as never before. This has probably influenced the increasing manifestation of agency in newsroom.

2.6 Hierarchy of influence

Whichever model is chosen to examine journalistic roles in the digital age, allowance should be made for a consideration of external factors that influence these roles. The concept of liquid journalism, where the boundaries of what journalism means are constantly changing (Deuze 2008), and where the newsroom has often been "delocalised", with a blurring of lines between producers (traditional journalists) and users (Sjøvaag & Karlsson 2017) is useful in this regard. These challenges, in some cases, call into question the epistemology of digital journalism research, the clear categories encountered before the digital era are now not as clear, therefore there appears to be a need to develop a new theoretical language (Sjøvaag & Karlsson 2017). Reese (2016) explains: "Technology-enabled changes in the media ecosystem have shifted old boundaries and encouraged new, more spatially oriented concepts, such as fields and networks" (389). He argues fields, spheres and networks are part of a new, unpredictable media landscape but despite the shifting nature of the media landscape there is still a need for a systematic framework to understand these emerging spaces. Reese & Shoemaker (2016) define the new, networked public sphere as "the broader socio-political deliberative arena to which journalism contributes" (393). They explain: "The network captures the blurring of lines between professional and citizen, and between one organisation and another, as they develop more collaborative partnerships across digital platforms. This is a different way of theorising media work compared to studies of production solely within and between institutions" (394).

Anderson et al (2014) also talk of "networked institutions" to explain how in the digital era news organisations have become more collaborative. Their study was concerned with the practice of journalism at a time when the news industry has changed from when it was "held together by the usual things that hold an industry together: similarity of methods among a relatively small and coherent group of businesses, and an inability for anyone outside that

group to produce a competitive product. They point to the same factors as identified by Reese & Shoemaker, a changing media landscape necessitating new forms of organisation. Reese (2016) argues that there are now many new analytical challenges, one of which is the definition of the newsroom, and, one could add, also the definition of journalism (Olausson 2017) in the digital age.

The "hierarchy of influences" model proposed by Shoemaker & Reese in the early 1990s and subsequent refinements offer a useful theoretical framework to analyse the creation of media against the backdrop of these changes and influences mentioned above. It allows for a wider picture than earlier models with their focus on gatekeeping and organisational constraints. The hierarchy of influences model could be particularly useful in the digital era because of its wide frame, as it was a milestone in creating a theoretical framework for studying the many filters the media use to shape a view of reality. Reese & Shoemaker (2016) explain that journalism professionals often held a "philosophically realist view of the world in which news of external events is "out there" waiting to be gathered and disseminated. But this process is a social construction determined by several larger forces, making the search for these forces and understanding how they interact a logical focus of theoretical development" (2016: 396). They wanted to examine questions of power, control, structures, institutions, class, and community (Reese & Shoemaker 2016). Their model offers a theoretical framework to understand and explain the "complex factors shaping media - particularly news content: From the individual to social system level" (Reese & Shoemaker 2016: 389), more so than the studies from the 1950s and 1960s managed to explore. The hierarchy of influences model works like a "map" showing how levels of social organisation influence media (Shoemaker & Reese 2014). The individual stands at the centre of their "map", and is affected by routines developed within organisations, and these routines are, in turn, affected by social institutions, contained within social systems (Shoemaker & Reese 2014). These levels range from personal views and roles of media workers on a basic level, and, at higher levels, the influences of media routines, media organisations, external pressures, and ideology (Reese & Ballinger 2001: 641).

Shoemaker and Reese suggest that scholars may use *any* or *a number of these* levels as a framework to analyse the roles of individuals within a greater social or institutional system. Shoemaker & Reese (2014) point out that their work *Mediating the Message* has been revised over the years to take into account the changing media environment and increasing digitisation. The original editions from 1991 and 1996 were completely revised in 2014. The latest edition was re-named *Mediating the Message in the 21st Century*. The writers cite, among other reasons, the "forces of technology and globalisation" that make the subjects of study, such as the news environment and news organisations, more problematic. Reese (2016) explains: "A hierarchy of influences model had worked well to disentangle the relationships among professionals and their routines - and the news organisations that housed them. But both the units and levels of analysis in journalism theorising have been destabilised and restructured. The public sphere is constituted with new configurations: Of news work, institutional arrangements, and global connections, which have produced new emerging deliberative spaces. We are all faced with the need to adapt our research thinking to this changing master concept" (2016: 817).

The fields and networks typifying the new media ecology, have, as discussed above, given rise to questions about the relevance of the hierarchy of influences model, which was rooted to an extent within known boundaries (the newsroom, society, ideology), whereas the new media landscape has increasingly blurred boundaries. Reese (2016), however, argues that although "emerging spaces in the networked public sphere may not fit as easily into the once familiar professional, organisational, and institutional containers … the new media configurations supporting these spaces must still be understood with reference to a larger framework of power" (2016: 390). Reese & Shoemaker (2016) show that hierarchical power is still part of the media landscape and much media work still occurs in institutionalised settings (which is indeed the case in this study, *Graphics24* is part of a larger institution). Despite the emergence of new media configurations, they are still located within frameworks of power and still require an organising model (Reese & Shoemaker 2016). Reese (2016) argues the hierarchy of influences model worked well to "disentangle the relationships among professionals and their routines -

and the news organisations that housed them" (2016: 817). He suggests, even though there is now a "new geography of journalism", the same model could still be applied to the new media landscape. He continues that there is still value in analysing the simultaneous contributions of different levels to news work. It is still possible to evaluate key concepts across the five levels of influence, using the levels to help explain and unpack these concepts.

Keith (2009) argues that the hierarchy of influences model cannot always adequately address the creation of content in the internet age because it relies too much on routines, and in the digital newsroom routines are often still being developed. This may be true in many cases but many newsrooms still follow fixed routines, therefore the hierarchy of influences model is still relevant in some cases. In this study, there was clear evidence of fixed routines which will be further explored in chapter 4.

The hierarchy of influences model offers ways to formulate questions and guide the researcher (Shoemaker & Reese 2014). It is a way to understand how the mediation processes in the media landscape work "through a combination of social practices and institutional arrangements" (Reese 2016: 390). They tried to move away from the earlier gatekeeping models that viewed the individual, within certain structural limitations, as the sole arbiter of media content (Keith 2009). The original hierarchy of influences model grew from and improved on, among others, early theoretical perspectives laid out by Gans and Gatlin, cited by Shoemaker & Reese (2014), to explain the factors that influence the creation of content. These early theoretical perspectives include the following:

- Content reflects social reality with little or no distortion
- Content is influenced by the socialisation of media workers
- Content is influenced by media organisations and routines
- Content is influenced by other social institutions
- Content is influenced by ideology (Shoemaker & Reese 2014: 6)

These theoretical perspectives helped Shoemaker & Reese (2014) to develop their five levels of analysis, a visual model of concentric circles that can be applied to examine the factors that shape media content, the hierarchy of influences model, which are:

- Individual characteristics of specific news workers
- Their routines of work
- Organisational-level concerns
- Social institutional issues, i.e. the roles of markets, audiences, advertisers, and interest groups
- Larger social systems, i.e ideology (Reese & Shoemaker 2016: 396)

They explain that, at each level, one can "identify the main factors that shape the symbolic reality - revealed through content, constituted and produced by media work - and show how these factors interact across levels and compare across different contexts (e.g. national, technological). By juxtaposing different levels within the same model, this approach raises the important distinction between structure and agency. As a human activity, media work naturally involves the agency of individuals, which is both constrained and enabled by the structures surrounding them. Ascribing relatively more agency to individuals leads to a greater emphasis on the personal characteristics that guide them ... an emphasis on macrostructures, on the other hand, tends to deemphasize this personal agency. A hierarchical model has encouraged the sorting out of these micro-, meso-, and macro levels and provides a framework for analysing the operation of combined factors. Evaluating the contribution of multiple levels simultaneously helps yield greater explanatory power" (386-387). Their model, therefore, offers a theoretical perspective that allows for the examination of news production from the level of individual agency to the institution by "sorting out" the different levels. This is still a useful model in the digital age and one that was employed in this study to take into account the external factors that shape the discourse in the *Graphics24* and *Netwerk24* newsroom.

2.7 A discursive construction of journalism

As shown above, there are some researchers who emphasise a need for a different theoretical approach when examining journalistic roles in the digital era, a move away from a focus on structural limitations and towards individual agency and how journalists negotiate the challenges and changes they experience. This study suggests that a possible theoretical model to help do this is Hanitzsch & Vos's recent and influential notions in their "discursive construction of journalism" model. Hanitzsch & Vos (2017) argue that earlier, "descriptive" studies of journalistic roles are thin on theory (2017: 115). Similarly, Benson (2017) suggest that the ever more complex digital media systems mean that "our capacity to criticise, map and explain them risks becoming progressively poorer" (2017: 27) and that descriptive studies are highly empirical but do not answer the question "why does it matter?" (2017: 34). Hanitzsch & Vos and Benson make an argument for systematic critique and a stronger theoretical framework in the digital era.

Hanitzch & Vos (2017) cite many past descriptive studies, including Laswell, White, and others that described the central functions of the press as "surveillance, correlation, transmission and entertainment" (2017: 115), and Cohen, who then started exploring journalistic roles more empirically. They cite Cohen who suggested the role of the press could be as observer, i.e. neutral, or as participant, i.e. in a role where the press would provide some services to policy makers, in return for information. Hanitzsch & Vos (2017) argue that, despite these studies, there has never been much consensus over a universal journalism culture driving journalistic roles, also because many earlier studies were mostly Western-oriented and examined the press from a Western normative point of view. Later studies cited by Hanitzsch & Vos (2017), such as Donsbach and Köcher and others identified different journalistic normative values in non-Western countries, such as interventionism (the willingness by journalists to become involved in social development) and development journalism in developing countries. Hanitzsch & Vos (2017) argue that, despite the presence of so many past studies into journalistic roles, there is a "considerable variation in terminology; a missing general framework for theorising journalistic

roles and journalism's identity; and the conflation of conceptually distinct types of journalists' roles" (2017: 116). They suggest a way to overcome these shortcomings is to look at what they describe as the discursive construction of journalism. They argue that journalistic roles exist because people talk about them within a relational structure that involves the public, the marketplace and the field of journalism itself. "Journalistic roles exist as part of a wider framework of meaning - of a discourse" (2017: 129). This understanding of journalistic roles as a "shared discourse" (2017: 116) is very useful at a time when there are "profound and dramatic" (2017: 130) changes in journalism, such as in the digital era.

In a much earlier study, which she later updated, Zelizer (1993) touched on the issue of discourse when she suggested that journalists should be seen as "interpretive communities". She suggests that the dominant frame to examine journalism and journalistic roles had been to look at journalism as a profession, which restricts an understanding of journalism because it "causes us to examine only those dimensions of journalism emphasised by the frame through which we have chosen to view them" (Zelizer 2017: 175). Seeing journalism as an interpretive community also "allows us to consider how journalists have productively used discourse … to generate meaning about journalism and address elements of practice overlooked by formalised cues of the profession" (Zelizer 2017: 175). They can generate collective interpretations of events (she uses Watergate as an example), and they are able to do these interpretations while the event unfolds, and while they retell it later. Zelizer (1993) suggests journalists are united through this shared discourse and collective interpretation of events, they become a group united by shared interpretations of reality, with certain patterns of authority and conventions (Zelizer 2017). She suggests that the concept of journalists as an interpretive community provides another frame to look at how they legitimate their roles than the cues provided by their profession, as has been used in so many studies of journalistic roles. She argues that journalists are (often) not affected by the "trappings of professionalism" (2017: 178) such as socially recognised paths of training or licensing. Journalists construct their own realities through shared discourse (Zelizer 1993).

Elaborating on this concept, Hanitzsch & Vos (2017: 120) define the discursive construction of journalistic reality as follows: “Simply put, journalistic roles are the discursive articulation and enactment of journalism’s identity as a social institution. Hence, journalistic roles set the parameters of what is ‘appropriate’ or ‘acceptable’ action in a given context.” Discourse implies an interchange of meaning among many different actors outside journalism, within journalism, and reflexively with themselves (Hanitzsch & Vos 2017).

Reflexivity was also highlighted in Usher’s (2014) study of the New *York Times*. She found that journalists often have reflexive discussions in the context of limiting structures. Zelizer (1993) also refers to reflexivity in the definition of journalistic roles. She shows that journalism has been interpreted and reinterpreted through time, via a discourse between different actors and among journalists themselves. This discourse was influenced by many factors, including economic and technological interruptions (Hanitzsch & Vos 2017) and this interpretation of journalism and journalistic roles is still happening in newsrooms, especially in the digital era where roles are constantly changing - in terms of both the wider roles of journalists in society, and the practical daily routines and roles in the newsroom. Hanitzsch & Vos (2017) explain that journalists renegotiate their roles as scenarios change. “As individuals are newly socialized to an institution’s roles, they become part of a discursive institution and are discursively exposed to the cognitive scripts and meaning systems that then allow them to do their work” (Hanitzsch & Vos 2017: 121) but they may be confronted with inconsistencies between their own experience and the “mainstream” view and they then refashion “cognitive scripts that they subsequently share with fellow journalists” (Hanitzsch & Vos 2017: 121). Zelizer (2017) also points out that discourse is instrumental “when it challenges the reigning consensus surrounding journalistic practice, and in this way it facilitates journalistic adaptation to changing technologies, changing circumstances and the changing stature of news work” (192).

Hanitzsch & Vos (2017) suggest that “the discourse of journalistic roles is one important area in which the struggle over the meaning and locus of journalism takes place” (123) and they suggest four analytical categories of the institutional roles of journalism. These are normative

and cognitive (both on the level of role orientations, referring to what it means to be a journalist and how to be a journalist); and practiced and narrated (on the level of role performance, or how journalists practice their roles). These four categories correspond to conceptually distinct features: "what journalists *ought to do*, what they *want to do*, what journalists *do in practice*, and what they *say they do*" (2017: 124). Most conceptions of normative roles have to do with how journalists meet the needs of the public and contribute to the working of democracy, these roles are socially negotiated and sensitive to context. Cognitive roles in turn are the institutional values journalists embrace as a result of their socialisation, i.e. these roles have to do with the aspirations of journalists and usually emerge from journalists' internalisation of their normative roles. Practiced role performance captures how journalists execute their institutionalised role performances; and narrated roles "denominates subjective perceptions of and reflections on the roles that journalists carry out in practice", in other words how journalists reflect about their roles (Hanitzsch & Vos 2017: 124-128).

There is some agreement among other scholars about whether the nature of journalistic norms and values is discursive. Olausson (2017) argues that it is through discursive processes that journalistic norms and values achieve meaning, and that discourse is what gives meaning to "our world and our place in it" (2016: 64). There seems to be a consensus among scholars in the field of journalism studies that what typifies more or less universal similarities in journalism can be defined as a shared occupational ideology among news workers which functions to legitimise their position in society. Deuze (2008) argues that journalists share a universal occupational ideology which helps them legitimise their work. This ideology includes these basic ideas: Journalism as a public service (the watchdog role); journalists being impartial; journalists being autonomous, free and independent; immediacy and speed; and ethical values (2008: 447). These are some of the socialised ideals journalists have internalised and that will affect how they discursively construct their roles.

The discursive construction of journalism offers a theoretical framework that is useful to examine the roles of visual journalists in the digital era. Are the visual journalists from *Graphics24* constantly reimagining their roles, discursively, against the background of their own ideology of visual journalism, and within the context of a changing institution? This model helps provide a way to think about and examine these changing roles.

2.8 Visual journalism

It has been pointed out in the literature that there is a need to theorise the visual aspect of news and the blending of different media modalities in storytelling, especially because of digitisation (Steensen & Ahva 2015). There is very little theory on visual journalistic roles specific to infographics and those who create them.

Many newsrooms see information graphics as an answer to the increasingly visual face of the world users live in, and a way to attract readers because they are so popular, especially online (Usher 2014, Newman et al 2016, De Haan et al 2017, George-Palilonis & Spillman 2011, Dick 2017). Lowrey (1999b) and Dick (2017) argue that infographics have become very popular since the 1980s and especially since the 1990s, initially because of the pervasiveness of television, and more recently, the fact that "our modern life, work and leisure are mediated by visual culture" (Dick 2017: 498). Dick suggests this visual turn in modern life gives a new significance to infographics in news and journalism. The search term "infographic" has been rising steadily on Google Trends since especially 2009 (Dick 2017).

There is some confusion about the "correct" terms for the type of visual journalism represented by information graphics: Information graphics, interactive graphics, multimedia or data visualisations (McNamara 2017)? These are in some ways conceptually different terms that all share some similarities. Dick (2014), in his study of news values and working practices that inform the production of interactive graphics, interchangeably uses the words "infographics", "interactives" and "visual journalism" to refer to the same items. This study uses a broad

definition of visual storytelling, a concept that encompasses all these aspects and more. Generally the terms “infographics” or “graphics” are used to denote visual storytelling. These terms refers to infographics produced in a newsroom with the purpose of providing news or information, to be disseminated online or in print. Dick (2017) and McNamara (2017) explain that infographics can come in many forms, including bar charts, pie charts, pictograms, diagrams, maps, visualisations or composites of these. All of these give readers the chance to extract information and make sense of that information. Infographic designers (also referred to as visual journalists/graphics journalists in this study) generally follow certain accepted standards, often based on self-created style guides (Dick 2014) or norms. *Graphics24* has such a style guide. Graphics designers in the news industry often refer to known experts, and many others, to develop and maintain design standards and norms.

There are some well-known practitioners in the industry, including Alberto Cairo from the University of Miami, Edward Tufte, formerly from Princeton University and current owner of Graphics Press, and Charles Apple from the *Houston Chronicle*, among others. There are international conferences such as the Malofiej Congress in Pamplona, mentioned above, where practitioners of news infographics meet on a regular basis to discuss developments in their industry, their changing roles and to award excellence.

2.8.1 Convergence driven by multimedia

(Vobič 2011) showed how multimedia in journalism is driven by convergence, with increasing cooperation and collaboration between different editorial teams, using a combination of technologies. Often this leads to the creation of new, shared newsroom, but, also often, the enthusiasm with which interactivity or information graphics is received, differs widely. Many journalists see the conceptualisation and research required for the creation of graphics as time-consuming and an additional, unwanted burden (Usher 2014). There is still a need to study clashes in the newsroom among different subgroups because of differing organisational norms (Lowrey 2002), especially the clashes between visual and word journalists.

2.8.2 Role perceptions

There are very few academic studies about the role perceptions of visual journalists specifically. Lowrey (1999b, 2002) did some early, and still some of the only, research examining visual journalistic roles in the newsroom. He examined the creation of textual and visual journalism in the context of conflicting journalistic norms held by different professional subgroups in the newsroom, specifically, as he called them, "word" people and "picture" people. Lowrey (2002) found that subgroups compete all the time, but not openly, often behind the scenes to avoid open conflict, so that production processes will remain smooth. Some of his results showed that successful visual journalists seem to adapt the rhetoric of journalistic norms (Lowrey 2002). Lowrey found that professional norms, in addition to structural and ideological norms, play a role in the shaping of visual news.

Dick (2014), more recently, filled some of the gaps in the literature with a qualitative study of visual newsrooms in the United Kingdom. While his study focussed on the creation of interactive graphics, it offers much useful theoretical groundwork for this study. His subjects were all "visual" journalists, he identified a gap in the literature regarding the views of non-visual (or non-interactive) journalists on interactives (or infographics). He explains that the production of interactive visual graphics (and, by inference, information graphics) brings together professionals from many different fields in the making of the news (Dick 2014). In the case of *Graphics24* these professionals are journalists from a traditional writing background, visual journalists, graphic designers with little journalistic background, an animator and some with knowledge of data visualisation. Dick (2014) questions whether these professionals bring influences that affect how visual stories are treated. Dick looks at the routines, processes and relationships that shape interactive graphics, with his studies being informed by organisational studies, interactive online journalism studies, and an overview of best practice in design and data visualisation.

Usher's (2014) study at the *New York Times* looked at how journalists attempt to negotiate the challenges of creating content for print and online media, with some reference to journalists' roles in creating interactive content and the roles of visual news people. She found that interactivity lead to entirely new forms of journalism. Journalists had to think beyond text and conceive visual ways of telling stories. Increasing digitisation has blurred the certainty of exactly how graphics journalists should fulfil their roles. Dick (2014) showed (in his study of interactive newsroom in the United Kingdom) that not only the roles of graphic journalists changed with the introduction of visual stories in many newsroom, but also the roles of writing journalists who need to conceive visual ideas for their stories. As Lowrey (1999b, 2002) showed, the production of visualisations involves bringing together professionals from different fields ("word" and "picture" people). Dick (2014) shows how people from these different fields affect the production of visualisations, by bringing in different influences affecting how graphics are selected, created and published.

2.8.3 Interactive norms

Because of a gap in the literature on norms specifically for information graphics, this study reviews some work on "interactive" norms as they are also visual, graphical representations of news. Usher's (2014) study at the *New York Times* found that "interactivity" leads to entirely new forms of journalism. She explains interactivity can refer to "the control that users exercise over the selection and presentation of online content, whether story text, audiovisuals or multimedia" (15). This type of interactivity is designed to keep users engaged for longer by offering them some kind of control over what they see and read on a site. It can be as simple as a picture gallery embedded in a story, or an information graphic embedded in a story. It calls for new storytelling techniques, ways to still keep users engaged. Journalists had to think beyond text and conceive visual ways of telling stories. This has a profound effect on how journalists conceive and practice their roles. Not only the roles of graphic journalists changed with the introduction of visual stories in many newsroom, but also the roles of writing journalists who need to conceive visual ideas for their stories. This, indeed, still offers much

scope for an exploration of visual journalism and its influence on journalistic roles of word journalists, with this study going some way to answering these questions regarding visual journalists and filling some gaps in the literature. In mobile journalism, there is also the small matter of smaller screens on smartphones. This affects how journalists will frame their stories (or graphics) (McNamara 2017). The smaller screen size and shape of mobile phones can mean that the way the story is packaged or told can over-emphasise or under-emphasise certain aspects, undermining journalistic principles (Poindexter 2016).

As a matter of context, it is worthwhile explaining briefly why most news media, including the *New York Times* (Tze 2016), have moved away from the type of interactive stories that were popular in the early 2010s. These were massive, immersive projects that offered much depth and beautiful storytelling techniques (such as the seminal Snow Fall graphic project by the *New York Times*). This was received enthusiastically by many readers and journalists, with initial predictions of the media "about to forgo words and pictures for a whole lot more" (Greenfield 2012) and it was widely hailed as an example of an immersive digital experience, with many others initially following in its footsteps, including the *BBC* and *The Guardian* (Dowling & Vogan 2017). Where "Snow Fall" and others like it succeeded was in the tablet market, creating a magazine-type experience on tablets and telling long form stories (Dowling & Vogan 2017). But as experience in newsrooms showed, this type of interactivity was not very successful in terms of user engagement. This type of storytelling involved great effort to create, in return for relatively small engagement from users (Tze 2016). Therefore, in recent years, interactivity or visual news storytelling has changed from deep, immersive, explorative visual stories such as "Snow Fall" to simpler visual stories that load easily and quickly on mobile phones and are quicker to design, offering the user just a few small, different visual elements for consumption on mobile phone screens.

Dick (2014) explores the concept of "interactive norms" further, while also considering the different outlooks on what makes news, or what makes good graphics, from different role players in a newsroom. He draws on Lowrey to seek "interactive norms" in the newsroom, such

as a common rationale to decide on interactives, established routines and consistency in approach to design. Dick cites work by Lowrey (2002) that look beyond ideological norms and management structures that shape behaviour in the newsroom to a level of differing professional norms and values among actors in the newsroom. In Dick's study these actors are graphics journalists, data journalists, statisticians and computer programmers, all with their own preconceived ideas of what makes a graphic newsworthy. Lowrey (2002) identifies three norms of visual journalistic work, namely journalistic norms, commercial art norms and integrative norms. Journalistic norms concern objectivity, commercial art norms have to do with aesthetics and self-expression, and integrative norms correspond with organisational norms such as organisational efficiency and interdepartmental cohesiveness. Different subgroups (i.e. "word" people or "picture" people) interpret and observe these norms in different ways (Lowrey 2002). These subgroups all have their own preconceptions of what would make a news graphic newsworthy and they all would like to exercise some control over the production of graphics. For visual journalists, the integrative norms are especially important, because of the uniqueness of graphic design work (time pressure being foremost) they want organisational processes to operate according to their practical needs.

Dick's subjects were all visual or statistical journalists, but many came from journalistic backgrounds. He found conventional journalistic values such as fairness and accuracy dominated their work but there were also other values specific to visual journalism, such as concerns about good and bad infographics. Organisational norms, such as best practice in term of user-centred design, budgetary concerns and risk aversion also influenced the graphics creation process. Some visual people believed word people did not understand numbers or charts. Visual journalists were more concerned about producing quality interactive graphics than pleasing other journalists. Dick found there were no clear norms among different team members about what made a graphic newsworthy, or what made a "good" graphic. Some visual journalists complained about over-prescriptiveness from word people, "bad commissioning" where graphics do not really explain a story better and an over-reliance on maps. Some visual journalists saw bad ideas as a waste of their time. Administrative arrangements played a strong

role in the quantity and type of work being performed. At *The Guardian,* the visual journalists did very little work for the Features desk, until they started attending the same meetings, when they started working closer together. Most of the news media in Dick's study had style guides, offering guidance about visual norms but there were still differing perceptions between visual and word journalists about what constituted good or bad graphics.

2.9 Analytical model

The analytical model for this study draws extensively on both Hanitzsch & Vos's process model, Reese & Shoemaker "hierarchy of influences" model, as well as Dick and Lowrey's "interactive norms model".

There has been a great deal of recent work on how the professional identity of journalists is discursively constructed in the new media ecology (Olausson 2017) but far fewer studies about the professional role conceptualisation of visual journalists (Dick 2014, Lowrey 2002). Of course, discourse never takes place in a vacuum, it takes part within a certain context and this context needs to be considered (Hülsse 1999). The key analytical model of this study, therefore, looks at the discursive construction of journalistic roles by graphics journalists within the context of the structures they are bound by. Hülsse (1999) argues that situations, institutions, social structures, knowledge, and identities can be included under the general terms of society and culture, and society and culture are constituted by discourse, but at the same time, they are also part of a discourse. Journalists, in other words, are part of institutions influenced by society and culture, and they understand and reflect on their roles within these structures through discourse, which then also influence their institutions and roles. The study evaluates the discursive construction of journalistic roles using the background of the hierarchy of influences model proposed by Reese & Shoemaker to help explain the many levels of influence, while using the categories of journalistic roles suggested by Hanitzsch & Vos to evaluate the discursive construction of roles. The study explores:

- The individual characteristics of graphics journalists and word journalists. This is related to the normative, cognitive and narrated roles suggested by Hanitzsch & Vos
- Their routines of work, which is relate to the practiced roles suggested by Hanitzsch & Vos
- Organisational-level concerns
- Institutional issues
- The larger social system (Reese & Shoemaker 2016: 396)

The study also looks at the exercise of individual autonomy and whether the networked environment affects this. The study explores why and how this is the case. Usher's (2013) study provides some insight into the limitations of structures that are constraining to news production in the digital age, namely organisational identity and time, while new technology enabled agents to introduce new routines. Specific to graphics journalism, Dick and Lowrey's frameworks of differentiating between "word" and "visual" people and trying to identify interactive (or, in this study: "infographics") norms, also inform this study. Roles and routines are evaluated against Lowrey's and Dick's norms for visual journalism: Journalistic, artistic and integrative.

CHAPTER 3

METHODOLOGY

3.1 Introduction

The digital news environment and the challenges of the digital age call into question the epistemology of digital journalism research. Many scholars have asked: Is it possible to tweak available theory or methods, or are entirely new methods required? (Sjøvaag & Karlsson 2017). As discussed above, theoretical models used to examine journalism have changed over the years, due in part to the changing nature of journalism but also due to the changing nature of knowledge and research. Early ethnographic studies (Breed 1955, Tuchman 1978) were innovative in their methods (Sjøvaag & Karlsson 2017), revealing interesting aspects of journalism practice and leading to theoretical innovation. These studies showed how news was produced, influenced by ideology, institutional constraints and the wider social world. In the digital age, some argue that it may be inadequate to rely on these earlier studies alone to explain and problematise the digital news production process (Reese 2016, Paterson 2017). The world is a more complex place now, and journalism is very different from what it was in the 1950s.

However, there are still physical newsrooms, where decisions are made and people perform journalistic roles, and there are still external factors affecting the news-making process (Reese 2016). There is still a need for research, including ethnographic research, to understand what exactly goes into how the news is created (Paterson 2017) in these institutionalised settings, where professionals interact and enact their roles in different ways. To access these enactments, this study largely uses ethnographic methods within a qualitative framework.

This study does not focus on the content of the work produced by visual journalists. The "liquidity" (constantly changing boundaries of journalism as defined by Deuze 2008) in the digital age (Karlsson & Strömbäck 2010), makes traditional content analyses difficult. It is hard to capture the news, and there is no meaningful index of news on the internet (Mahrt & Scharkow 2013). Some researchers use computer-assisted data gathering as a way to gather data for digital news research (Lansdall-Welfare, Lewis & Christianini 2017). These computational methods often require new skills to master changing programs (Karlsson & Sjøvaag 2017). This study, however, is concerned with human actors who are both "doing" journalism and simultaneously exploring and contesting what journalism "is" in the digital age. Understanding this can be approached qualitatively through an ethnographic study.

In the digital age, the non-physicality of some newsrooms can inhibit traditional ethnographic research. Some digital news is created by a variety of actors, not bound to place, such as the news distributed on social media (Reese 2016). The delocalisation of the digital newsroom has led to (sometimes) an overlapping relationship between the producer and the user (Sjøvaag & Karlsson 2017). Some researchers (Anderson et al 2012, Reese & Shoemaker 2016) call this the "networked newsroom", where producers and users overlap. Newsroom ethnographies assume that journalism is produced in a secluded area where the actors can be observed (Sjøvaag & Karlsson 2017). This is becoming increasingly difficult in the digital age with newsrooms becoming more networked and delocalised (Sjøvaag & Karlsson 2017), but in this study, this is not (yet) a significant issue. It is, naturally, difficult to do an ethnographic study in such a situation if the news is not produced in a "secluded area" and where it is difficult to pin down the actors in the process (Sjøvaag & Karlsson 2017). It is, however, possible to do an ethnographic study where there is still a newsroom in the "traditional" sense. The newsroom is often still the place where most decisions are made and where working practices can be observed (Paterson 2017). This is indeed the case with this study.

3.2 Qualitative research

Qualitative research methods are often associated with exploration, interpretation and understanding, with researchers emphasising the human aspect of researching the social world (Snape & Spencer 2003). The focus is on process rather than outcome, the primary goal is in-depth, "thick" descriptions (Deacon, Murdock, Pickering & Golding 1999) and understanding of actions and events, and the main goal is to understand social action in a specific context rather than generalise (Babbie & Mouton 2001). Qualitative research is, therefore, particularly suited to examining the reasoning behind organisational and production issues in a digital newsroom and the way the subjects of this study, graphics journalists at *Graphics24* and editors at *Netwerk24*, perceive and practice their roles. This study is concerned with discourse and how people negotiate their roles within a system of social, cultural and institutional structures. In the digital news environment, quantitative research can sometimes be very useful because of the massive amounts of available data but Lansdall-Welfare et al (2017) point out that although massive, automatic quantitative analysis of digital news has the advantage of analysing content on a huge scale it does not provide the human judgement needed for deep analysis. This study is not concerned with massive amounts of data but rather with interpreting human behaviour and relations (Brennen 2013) on a small scale. The purpose of this study is to get close to the people being studied (Bryman 1988) in order to understand their behaviour (Babbie & Mouton 2001) and explore organisational issues in the newsroom. The study explores how graphics journalists think and what influences their thinking. Qualitative research methods will help provide an in-depth and interpreted understanding of the social world of research participants (Ritchie & Lewis 2003, Brennen 2013).

The research thus takes place in the natural setting of the actors; the focus is on process rather than outcome; the primary goal is in-depth descriptions and understanding of actions and events; and the main goal is to understand social action in a specific context rather than generalise (Babbie & Mouton 2001). The aim is to understand the transformation of *Graphics24* into a mobile-first information graphics team and to analyse structural, professional and

personal issues, the issues related to the discourse of and "in" journalism, and the change this brings about.

The study is a small and focussed observational study of *Graphics24*, conducted in the newsroom in Johannesburg, using elements of participant observation and in-depth interviewing (Bryman 1988, Ritchie & Lewis 2003) as the primary data gathering methods. These two methods on their own have some weaknesses and strengths. Participant observation is often criticised as being guided by the subjective inferences of the researcher, but using this together with other methods there is a stronger base for triangulation (Brennen 2013, Cottle 2007). A unique advantage of ethnographic research is the ability to reveal inconsistencies and conflicts in the actions of actors (Paterson 2017). Study participants might, for example, say one thing in an interview but do something entirely different when being observed, while practicing their roles under the pressure of deadlines or other institutional limitations (Paterson 2017). This makes ethnographic observations very valuable to observe the real situation. My own background at *Graphics24* has influenced my knowledge of the graphics team and might lead to somewhat subjective lines of questioning. But, using participant observation and in-depth interviews in tandem, introduces an element of triangulation that can help overcome personal biases (Babbie & Mouton 2001, Ritchie & Lewis 2003). I compared the results of my observations with interview results to corroborate my findings and introduce triangulation to the study.

This study, with its focus on sociological issues in a specific newsroom, also follows a naturalistic (Bryman 1988) and constructivist (Baxter & Jack 2008) approach. In following a constructivist approach, the focus is on understanding the reality of *Graphics24* as it has been shaped by specific cultural and historical structures and economic conditions (Brennen 2013). There are many possible interpretations of "the truth" (Brennen 2013) in a newsroom filled with human interaction, different societal and organisational constraints and economic conditions that affect the workflow and organisation of the newsroom. Mabweazara (2015) suggests that this approach is especially relevant in an African context, as constructivist and sociological approaches to reflect on journalism practice on the continent offer a wide framework that

enables the researcher to examine the adoption of new technologies "as shaped by multiple elements within the social structure in which their professional routines unfold" (2015: 118).

3.3 Newsroom ethnography in the digital age

Some qualitative studies have been conducted successfully into digital newsroom. An example of qualitative data gathering when researching social media, is a study by Harcup (2016) of a political blog based in England, *The Leeds Citizen*. The study involved audience research by using focus groups and questionnaires. His research found a very positive attitude among readers to *The Leeds Citizen* "because of their dissatisfaction with much mainstream media and because the site's alternative approach to journalism helps them make sense of the world and provides them with useful information" (Harcup 2016: 14). Usher (2014) used ethnographic field research methods to immerse herself in the *New York Times* newsroom, where she observed reporters, editors, web producers and other staff members. She did more than 700 hours of field work, culminating in her book, *Making News at the New York Times*, an in-depth study of all aspects of the digital newsroom at this legacy paper. Cottle (2007) shows that ethnographic studies provide insight into the daily routines and bureaucratic nature of news media, offering insight into the workings of the news media.

Ethnographic studies have been used successfully to research integration, convergence and organisational questions in newsroom in the digital era (Vobič 2015, Larrondo et al 2016, Aviles, Meier, Kaltenbrunner, Carvajal & Kraus 2009), and there are ethnographic studies into digital newsrooms that were conducted in existing, physical newsrooms, such as Ryfe's (2009 & 2012) studies. This will become increasingly difficult as the physical spaces where news is being created will become more fluid and unclear. Some ethnographic studies have found that in many cases there is no big difference between how "traditional" newsrooms operate and how digital newsroom operate (Reese 2016).

Paterson (2017) lists some of the advantages of using an ethnographic approach to researching digital news. These include being able to gather a huge amount of data first-hand; being able to witness actions and routines; being able to gain the confidence of the subjects and thereby getting inside information; being able to see conflicts; and being able to provide a

comprehensive description of the social use of technology when analysing the gathered data.

In the ethnographic tradition, researchers "immerse themselves" in a certain setting to understand the objects of research intimately. Qualitative researchers do not search for straightforward results as do quantitative researchers, but rather for knowledge that is "co-produced" by the researcher and the subjects. Ethnographic immersion can give the researcher insight into the struggles and practices of digital journalists as they negotiate the changes around them (Paterson 2017).

Newsroom ethnographies can be difficult because of difficult access and because ethnographic observations take time to do well (Stonbely 2015, Paterson 2017). Because of these reasons there are relatively few newsroom ethnographies (Stonbely 2015) but there is good reason to conduct ethnographic research, for example to do studies of specialised newsrooms. Usher (2014), for example, found that very few ethnographic-based studies have been done into business newsrooms, a specialised type of newsroom. This study also examines a specialised newsroom, a graphics newsroom. Furthermore, there are very few ethnographic academic studies looking at how technological changes have influenced the roles, structural organisation and professional ideology of graphics journalists (Reese & Shoemaker 2016), although there is a growing body of ethnographic work on digital media in general (Coleman 2010).

3.4 Shortcomings

A possible shortcoming of an ethnographic approach is that it represents a phenomenon from a single perspective and offers little opportunity for confirmation by other researchers (Paterson 2017). Paterson (2017) points out that an over-reliance on early, ground-breaking ethnographic studies is constraining research in the digital era. He suggests that these early studies went a long way towards explaining how news was produced and why it looked the way it did, but because the modern newsroom is a more complex entity in many ways, it is important to focus very clearly when doing an ethnographic study of a digital newsroom. "With an alien culture laid out before them, ethnographers are challenged to focus their observations and how to use them to draw conclusions" (Paterson 2017: 113). My background at *Graphics24* means I do not have this disadvantage of "an alien culture laid out" before me. I have enough insight and

background to know what I saw and to know where to begin with my observations.

Another weakness with ethnographic methods in qualitative research is that decision-makers are not always part of the study. They often do not sit in the newsroom, so a researcher can often only see the effects or results of decisions that have been made elsewhere (Cottle 2007). This was encountered in this study, as subjects spoke of decisions that were made elsewhere which they simply had to implement. It is not possible, based solely on participant observation and interviews of journalists in a newsroom to find the reasons behind executive decisions, made at managerial levels. Interviews with some senior editors who are involved in important decisions, do help provide some insight into how these decisions were made.

3.5 Methods

Before the study commenced, exploratory discussions were held with some team members and they indicated a willingness to participate. Semi-structured interviews and ethnographic observations were the main research gathering methods. Some email interviews were conducted.

3.5.1 Observations

I spent several days with the *Graphics24* teams in Johannesburg where I observed their interaction with *Netwerk24* and their other clients. *Graphics24* has offices in both Johannesburg and Cape Town but operates as one team with an editor sharing the day's work between team members in both cities. I decided to focus on the Johannesburg office only for my observations, because this office is where most members of the team are based, and where most other *Graphics24* clients are based. Participant observation offered me the opportunity to observe the usually invisible workings on the inside of a newsroom (Cottle 2007). I immersed myself (Deacon et al 1999) in the *Graphics24* newsroom in Johannesburg and explored the workflow over a few days, from early in the morning when the graphics editor received diaries to the end of the day when graphics were being finalised. I was able to observe exactly how days in the graphics newsroom unfolded. I conducted a total of 40 hours of observations in Johannesburg.

These 40 hours of observations represent a regular working week, giving insight into the day-to-day functioning of the graphics newsroom and interaction with journalists and editors.

3.5.2 Semi-structured interviews

Just as the digital age and the delocalisation of the newsroom (Sjøvaag & Karlsson 2017) present problems in terms of ethnographic immersion, so do they also present problems when conducting interviews (Sjøvaag & Karlsson 2017). Sometimes it might be difficult to pin down the actors to interview. Once again, in this study, this is not a problem as there is a physical space where the participants work and were interviewed.

In addition to observation, a number of semi-structured in-depth interviews (Bryman 1988, Richie & Lewis 2003, Deacon et al 1999) were conducted. In interviews and observations patterns and how different participants think about the infographics production process were identified. I endeavoured to understand the construction of notions of journalistic roles, and construction of notions of "journalism", specifically from the viewpoint of graphics journalists, in order to describe and interpret their behaviour (Babbie & Mouton 2001, Richie & Lewis 2003, Snape & Spencer 2003, Deacon et al 1999). Participants were interviewed in semi-structured, open-ended personal interview sessions in Johannesburg. One Johannesburg participant was interviewed by email because she is hearing-impaired. The two graphics journalists based in Cape Town were also interviewed by email. A total of six graphics journalists (the entire graphics team), two senior editors and one news editor were interviewed. Questions were adapted as necessary to explore wide-ranging topics and answers.

These questions were grouped into four broad topics, correlating with the analytical model for this study, namely: Individual characteristics of graphics journalists; routines of work; organisational-level concerns; institutional issues; and the larger social system. All these questions, ultimately, helped with exploration of the main research question, namely how graphics journalists in the largest graphics newsroom in South Africa are adapting their roles, routines and work processes to produce information graphics for mobile phones, and how this is impacting on their sense of their journalistic roles.

Some of the questions asked were:

Questions related to routines of work and practice

1. How does mobile-first graphic design affect the process and workflow, in other words, do you consider what your graphics will look like on mobile phones and does this affect your work process?
2. Are your graphics that appear in print different from the ones that appear on mobile phones? In what way?
3. How do you experience the change from designing for print to designing for smartphones?
4. Do you think small graphics as they would appear on smartphone screens are as effective as large, printed graphics?
5. How do you decide on topics for graphics and if graphics are newsworthy?
6. What is the creative process that you follow? In other words, how do you go about designing a graphic?

Questions related to individual characteristics of journalists (and ultimately normative values)

7. Do you feel challenged by a mobile-first outlook? What does mobile-first mean to you?
8. What do you think the transformation from large, printed graphics to small graphics for use on mobile phones means for the future of journalism and informing the public?
9. What do you think your role as a graphics journalist is? Do you see yourself as someone who needs to keep the public informed?
10. How do you think graphics on mobile phones can keep the public informed?

Questions related to institutional or structural challenges

11. Do you experience any challenges when you produce graphics – structural (for example computers and programming) or organisational (for example in interaction with others)?

12. How do you decide if a graphic will work on a mobile phone, or not, and what makes a "good" graphic?

Questions related to the broader social system (and ultimately, aimed at understanding the key contestations and issues preliminary observation had revealed)

13. How do you think communication between journalists, editors and designers can be improved?
14. Do you think current routines and practices are successful?
15. Do you think there is value in a centralised, separate graphics division?
16. Do you think designers are sufficiently involved in the news making process?

Answers to these questions by the study participants helped derive information about the perceptions of their roles as visual journalists and how they practice their roles, as well as how they discuss and contest their roles in the changing environment.

3.6 Ethical considerations

There are some additional ethical considerations that this study had to grapple with, because I was personally involved with *Graphics24*, from 2010 until end 2016, in a managing capacity. I am mindful of the need to balance my access and historical understanding with an open-minded critically distanced approach. I was the founding editor (in 2010) but I left the team in December 2016 to take up a fellowship as journalism lecturer at Stellenbosch University. It is possible that I might be too close to the subjects being studied because I was the founding editor and that might lead this study having auto-ethnographic elements, but as pointed out above, I have since left the team permanently and I am mindful of maintaining a critical distance. My personal involvement did provide me with excellent background and context. I do not, however, think this study is auto-ethnographic in nature as I am no longer involved with the department. Autoethnography is an approach to research that describes and systematically analyses "personal experience in order to understand cultural experience" (Ellis, Adams &

Bochner 2011). It is about examining and describing one's own life experiences in an attempt to build understanding, and then sharing this understanding with others (Ellis 2005). This is not what this study is about.

My personal insight and background do give me some insight into understanding the experiences of the *Graphics24* team and have influenced how I frame this study, with some insider knowledge that graphic design for mobile phones is a big challenge the *Graphics24* team are grappling with. However, my analysis here focuses only on what I observed and what I gathered from my interviews during this study. My personal insights of course also helped me ask well-informed and probing questions based on my past knowledge, although I may also overlook some obvious questions because of that knowledge, about topics that I might, subconsciously, not consider worthy of academic study. I attempted to avoid this by focussing strictly on my research question, and through using results and models from similar studies to inform my research.

In any ethnographic study the participants should all take part voluntarily and be informed about the details of the study and the motives of the research, and that they may withdraw at any stage of the study (Brennen 2013). It is important to gain the trust and collaboration of participants (Brennen 2013) while still having the freedom to conduct research. In this regard, my past involvement at *Graphics24* is beneficial, as I have gained the trust of all team members over the years and during interviews and observations there were no qualms from their side to answer my questions in an honest and direct way. They have never been afraid to speak their minds, and they were not afraid to be honest and open during the research period. The subjects of the study are full-time employees at a large media organisation, therefore they may have some fears about their job security. Their right to work should be protected (Houston 2016). The study was conducted with support from their manager, the chief-editor of *Netwerk24*, who gave permission for the study. This helped participants to feel comfortable about the study. All participants provided their informed consent.

CHAPTER 4

THE DISCURSIVE CONSTRUCTION OF JOURNALISM AT GRAPHICS24

4.1 Introduction

The previous chapter explained the reasoning behind methods employed in this study, namely immersive ethnography combined with semi-structured participant interviews, informed by the theoretical framework outlined in Chapter 2. As explained in the previous chapter, I have some insight into the routines of the graphics team as their former editor and I am aware of the need to approach my observations with an outsider's perspective and "academic" distance. This is not easy. This study takes care to report back only on results of my own observations and interviews for this specific project, and to continuously reflect on whether I am adding contextual observations based on my previous experience as editor. Where I add this kind of information, based on having "been there" I will point that out. The aim of observations and interviews were to find an answer to the main research question, namely how graphic designers negotiate, think about and enact their changing roles as journalists in a rapidly changing, mobile-first digital environment.

The study participants were:

- Participant 1, at the time acting editor of *Graphics24*, appointed permanently as editor in November 2017 (personal communication, July 6, 2017 & September 5, 2017)
- Participant 2, graphic designer (Johannesburg) (personal communication, July 6, 2017)
- Participant 3, graphic designer (Pretoria and Johannesburg) (personal communication, July 6, 2017)
- Participant 4, graphic designer (personal communication, July 6, 2017)
- Participant 5, graphic designer (Cape Town) (personal communication, November 24, 2017)

- Participant 6, graphic designer (Cape Town) (personal communication, November 30, 2017)
- Participant 7, a deputy news editor at *Netwerk24* (Johannesburg) (personal communication, September 5, 2017)
- Participant 8, a deputy editor at *Netwerk24* assigned to the digital desk (Johannesburg) (personal communication, September 5, 2017)
- Participant 9, a voices editor (opinion, columns and features) at *Netwerk24* (Johannesburg) (personal communication, September 5, 2017)

4.2 Observations

Observations were conducted in the Johannesburg office of *Graphics24.* Most members of the graphics team are based in Johannesburg, the editor is based in Johannesburg, and Johannesburg is the place where the graphics team members are still seated separately from the main newsroom. The situation in Cape Town, where two designers are seated in the main *Netwerk24* newsroom, is not representative of the day-to-day functioning of *Graphics24*. This is an insight I have based on my own experience as previous editor of the team.

4.2.1 Johannesburg

Graphics24 consists of a "head office", based in the Media Park building in Auckland Park, Johannesburg, on the first floor, the same floor as the *Netwerk24* newsroom. This building houses many of their other "clients" as well. The graphics team are seated separately from the main *Netwerk24* newsroom, in an enclosed cubicle with glass walls next to the kitchen. This position was selected by the team during a period of reorganisation of office space by Media24 as part of a rationalisation programme in 2015 (I was involved in the decision). The graphics section is separate from all other newsroom on the floor but in a relatively central position, between all their "clients" in Johannesburg: *Rapport*, *City Press*, *Huffington Post* and *Netwerk24*, with *Netwerk24* being their closest neighbour. (As is explored below, this

separation was often highlighted by editors from *Netwerk24* interviewed for this study as one of the main obstacles they encountered in the production of graphics)

The graphics cubicle can seat six persons. At the time of observations only four seats were occupied, by Participant 1, and three designers based in Johannesburg, Participant 2, Participant 3 and Participant 4. Two seats are vacant. Participant 3 also often works from the Pretoria office of *Media24*, which is closer to his home. Mostly all graphics commissions come from the Johannesburg office and he communicates by email.

I followed the graphics team over a period of a week, from Monday to Thursday, as they produced infographics for *Netwerk24*. This represents the time when they do most of their work for *Netwerk24*. I did not do observations on Friday because just before weekends the team focus increasingly on doing print work for *Rapport* and *City Press*, both of which are Sunday papers with deadlines on Friday and Saturday, and not part of this study. As explained in Chapter 1, the team also have other "clients" but the focus of this study is their interaction with journalists from *Netwerk24*. This work for other clients sometimes impinge on their work for *Netwerk24* and is a source of tension that could be usefully explored in another study. The scope of this study, however, does not allow for a detailed analysis of all the work *Graphics24* do for all their clients. Suffice to observe, the team constantly negotiate their workload between their different clients to be able to handle as many requests as possible. Observations and interview results showed that the graphics team legitimise their "reason for existence" by the considerable amount of work they do. As will be explored, there appears to be an attitude of accepting all work that comes their way, even if it means very heavy workloads and to an extent "neglecting" some clients or neglecting mobile-first work.

This theme is a one of the main causes of tension with *Netwerk24*. Why did the graphics team appear to have developed a "service-delivery" discourse among themselves? Is this their defence against the changing news environment and increasing insecurity about their jobs? On the other hand, what informed the word journalists' discourse? Why are there differing

outlooks and very different perceptions of external influencers between the “word” and “visual” journalists in this study?

4.2.2 Cape Town

There are two graphics journalists based in Cape Town, they are seated in the main *Netwerk24* news hub, next to the news editor and other section editors. I did not observe them for this study. They report directly to the graphics editor in Johannesburg, although sometimes they receive direct requests from journalists in the Cape Town office and will then simply inform Participant 1 about what they are doing. Despite being seated in the main news hub, they do not report to the news editor nor participate in any news discussions. This is an observation based on my own past experience as their manager and subsequent personal visits to them while I was based in Stellenbosch. Because they operate as part of the main graphics team, receiving their commissions from Johannesburg, they do form an integral part of the graphics team and not the news team, even though they are based in Cape Town.

4.3 Key insights from interviews and observations

In interviews for this study, graphics journalists and word editors were probed about the roles of visual journalists, specifically about how they are negotiating the changes from a print environment to a digital environment with a mobile-first outlook. A semi-structured interview process was followed, with follow up questions where required. Questions were informed by the analytical model, as discussed and formulated in the previous chapter and repeated below, as well as by personal observations during my week of immersion. Themes explored were:

- The differing characteristics of graphics journalists and word journalists. This relates to the normative, cognitive and narrated roles suggested by Hanitzsch & Vos
- Their routines of work, which is related to the practiced roles suggested by Hanitzsch & Vos “process model”

- Organisational level concerns
- Social institutional issues (markets, audiences)
- The larger social system (ideology) (Reese & Shoemaker 2016: 396) that, together with organisational and social layers, contribute to a "hierarchy" of influences on these journalists' role perceptions.

Questions and answers were then categorised into three broad sub-categories, enabling a structured analysis of research responses and the factors influencing the performance of visual journalistic roles in the digital era. These subgroups are:

- Being visual journalists in a mobile-first world, and the tensions created by differing normative outlooks between "word" and "visual" journalists
- Structural and institutional issues and the tension this created in the performance of visual journalistic roles
- Communication and conflict between "word" and "visual" journalists

In a digital world with increasing consumption of news on smartphones the question of how mobile-first design has affected the roles of graphics designers in a newsroom is a relevant and important one as it will provide explanations and descriptions of how graphics journalists practice their roles in this new environment. This chapter examines the level of routines of work (Reese & Shoemaker 2016) and the practiced roles of journalists as suggested by Hanitzsch & Vos (2017). The individual characteristics of graphics journalists and how these relate to normative roles, as suggested by Hanitzsch & Vos (2017), are also examined. These questions concern the normative, cognitive and narrated roles of journalists, in other words, what it *means* to be a graphic journalist in the digital era and how these perceptions were formed; and if there were any differences between "word" and "picture" people and what those differences mean in terms of how roles are enacted. The existence of norms for designing mobile-first graphics (Dick 2014) is also explored, as well as structural and organisational limitations and issues of communication and conflict, all factors that affect how graphics

journalists in this study execute their roles in the digital era and how they think about these roles.

The study identified two distinct groupings in the newsrooms: Visual journalists (all members of *Graphics24*) on the one side shared many views and a similar discourse, while the same was true for "word" journalists (the three senior editors from *Netwerk24* who participated in the study).

4.3.1 Routines

The study examined daily routines, regular graphics and how the team re-purpose graphics they created for other clients so that these graphics could also be used by *Netwerk24*. Routines help show how a variety of internal and external factors affect journalistic roles in a newsroom, and, ultimately, how journalists negotiate these influencers to practise their roles on a daily basis.

i. Daily routines: How graphics get commissioned

The hierarchy of influences analytical model employed in this study to account for external forces influencing the news making process, relies strongly on understanding and unpacking the routines in a newsroom. There have been some counter-arguments that news production in the digital age rely less on routines because these newer routines are still developing (Keith 2011). However, this study found, despite working in what is supposed to be a mobile-first environment, the day-to-day work of *Graphics24* appear to be rooted in fixed routines, as described below. This also emerged in interviews with visual journalists and editors. In many ways, the graphics newsroom still functions like a traditional print newsroom, with fixed diary times, fixed deadlines and very clear, regular work processes. This conforms with findings by Ryfe (2012) in his study of American metro newsroom and Usher's (2014) study of the *New York Times* that, in many ways, journalistic practices have not changed from the print to the digital era, with print routines often remaining in place, even in highly digital operations. Journalists

still collect news in much the same way as before and still follow certain regular print routines, such as diary meetings and fixed deadlines.

Observations confirmed the existence of regular routines at *Graphics24*. There was, however, a distinct discourse from the side of "word" journalists, desiring newer, more immediate routines aimed at a mobile-first publishing environment. Visual journalists expressed less urgency about mobile-first. During the observation week, Participant 2 and Participant 5, for example, spent time working on their own ideas for graphics, which they had identified themselves and were aimed primarily at print audiences. These were large, detailed graphics, which they said gave them better opportunities to express themselves artistically than small mobile graphics. The views of visual journalists on mobile graphics showed a strong desire from their side to keep working on large, visually attractive graphics instead of small mobile graphics. Perhaps part of the reason for this is the highly-competitive nature of the team. Team members always participate in the annual Standard Bank Sikuvile Journalism awards, where they generally do very well (having won the awards for best graphics journalists every year from 2010 to 2016), and much of their print work is aimed at this competition (this is an insight I base on my previous experience as editor of the team). Participant 2 expressed in words what many of the visual journalists appear to think:

> "I don't think it is ever going to be only mobile. Print will always be involved. Thirty years ago they said print was dead but I think it is going to be with us for a long time."

This stands in sharp contrasts to the word journalists' side, where mobile-first is the main imperative informing their work, as expressed by Participant 9: "We (*Netwerk24*) automatically work for mobile first, you don't even think about it."

Observations showed persistent print routines at *Graphics24* and some at *Netwerk24*. Every working day starts with a diary meeting at *Netwerk24*. Participant 1 receives this diary from the

Netwerk24 news editor by email, around 10am. He does not attend the meeting. The diary is a national diary, with news for all the different *Netwerk24* regions, correlating with the distribution areas of the three main Afrikaans newspapers that form the print side of *Netwerk24*. These are *Beeld* (Gauteng, Limpopo, Northwest and Mpumalanga), *Volksblad* (Free State and Northern Cape) and *Die Burger* (Western, Eastern and southern parts of the Northern Cape). The *Netwerk24* website, however, does not have regional sections. The daily routines followed the same pattern every day during observations. Twice a day Participant 1 sends a diary listing infographics for the day, and older ("held") infographics that have not been used yet, to news editors, generally around 3pm and just before he leaves, at 6pm. Participant 1 explained that *Graphics24* supply infographics to both the main site and the individual newspapers (and their other clients). There is a separate section in the national news diary listing infographics. There are also sections for business, politics and sport.

Participant 1 appears to be the main "gatekeeper" deciding on whether stories should be turned into graphics from the graphics side. He scans the news diary at his desktop on a daily basis to identify graphics ideas. These are based on his own views of what would constitute a good graphic. These norms are based on his concepts of artistic expression and to an extent on news value, although some graphics are more informative, rather than breaking news, as Participant 1 explained: "A graphic should be easy to read with all the required information and it should be visually attractive."

During the week of observations for the study, mobile graphics often appeared to be an afterthought, to be done only after print graphics had been designed. For example, on the Tuesday of the observation period, Participant 1 decided to resize existing print graphics for online use because he felt there was a need for some visual news on the *Netwerk24* website. Participant 6 had worked on a graphic about petrol prices, which had been printed already. Participant 1 asked him to resize this for mobile use. Participant 1 sent Participant 6 an email with an example to show him how to make the changes to make the graphic mobile-friendly. The shape of the graphic was changed from a square shape to a vertical shape, using the same

text as the print graphic. Participant 6 also worked on a graphic about bone marrow transplants, it was a direct request from a journalist in Cape Town to Participant 6. This was one of many examples of a print graphic being adjusted for mobile use after it had first been designed for print. Participant 6 sent the bone marrow transplant graphic to Participant 1, via email, once it was ready. This graphic then went through various changes before it was mobile-ready. Participant 1 suggested various design changes, via email, to make the text simpler and easier to read on a mobile screen. The resizing involved some deep changes to the graphic, changing its shape and the use of pictograms and images considerably, but still using the same text, to offer a reader on a mobile phone a clearer reading experience (see addendum 1).

These details are worth exploring because it reveals how the routines are fairly set and at odds with the commitment to mobile "first". Regarding the bone marrow transplant graphic, Participant 1 explained that the actual workflow process should be that journalists or editors contact him, as graphics editor, first and he will then allocate projects to whichever designer is available. His experience showed, however, that journalists in Cape Town would often approach designers directly and not work through the graphics editor. The graphics journalists sit in the main *Netwerk24* newsroom in Cape Town. This overriding of workflow processes appeared to cause some tension for Participant 1 and was, perhaps, one of the reasons why Participant 1 did not support the idea of reintegrating *Graphics24* with the main newsroom, which is one of the main causes of tension explored later in this study. It had to do with his authority over the team, which would be diluted in a shared newsroom.

The *Netwerk24* team members also sometimes commission graphics for stories, based on what they consider good visual stories. Participant 7 explained: "Our stories should be pretty, they should be integrated into their stories, they should be told in a way that is easy to understand." Journalists sometimes walk to the graphics section, or send emails, requesting specific graphic. This process, with the graphics editor not participating in planning meetings and deciding by himself which stories could be turned into graphics, and word journalists trying to come up with visual story ideas by themselves, appears to be a leading cause of tension and confusion. From

the word journalists' side it is not seen as the optimal way to work. It is a strong theme in this study. Participant 9 said there is a desire for more input and guidance from the graphics editor. She used diary meetings as an example:

> "A meeting works like this, every person thinks about their own section, and how that section can contribute. So, when we meet, nobody else will say, let's do an in-depth piece about this or an opinion piece about that. I do that. So the meetings give me ideas about in-depth and opinion pieces. And if the graphics editor were to attend, he will get many ideas, he will come up with ideas that nobody else will think of."

Participant 1, however, generally does not speak to anyone about his graphics ideas in person:

> "When I identify possible graphics, I send an email back to the news editor to see if there is any interest from the news desk. Often the news editor does not reply, then I know there is no interest. If the news editor replies, I follow up by allocating the graphic to a designer and arranging for information to be sourced. I send another email to the journalist who is writing the story, requesting information for the graphic. When I get the information, I send it [by email] to the graphic journalist who will design the graphic."

These routines persist despite some participants highlighting the importance of mobile-first journalism and closer contact in interviews, and the strong prevalence of a discourse on mobile-first design in the *Netwerk24* newsroom, as expressed by Participant 8:

> "Journalists and graphic designers need to see one another while they are working on projects, because news moves fast and the graphics team should be part of the entire planning process and the

development of a story. The current system does not work, it is like broken telephone, because someone needs to get up and walk to the graphics section to discuss graphics."

The graphics team's routines appear to focus on efficiency and being able to deliver as many graphics as possible, informed by the demands of their many clients and demands of speed, thereby removing much personal contact with *Netwerk24* and causing tension from the word journalists' side. The two sides have their own preconceptions of what graphics should do and are influenced by different normative outlooks (Lowrey 2002) in practising their daily roles, the word journalists desire immediacy and mobile-first while the graphics journalists prefer delivering as many graphics as possible, as fast as possible, rather than increased interaction to create better mobile-first graphics. This is the result of the organisational position they find themselves in: A centralised team with a wide brief.

ii. Regular graphics

There are several regular graphics that the team work on every day, including the weather maps for *Beeld* and *Die Burger* (but, curiously, not for *Volksblad*, where graphic designers who design advertising, based in Bloemfontein, update the weather map). *Graphics24* also update a small, mobile-friendly weather graphic for a *Netwerk24* news app called *NetNuus*. This app provides news highlights only. These regular graphics affect routines on a daily basis, these are fixed organisational norms (Dick 2014) that add specific demands to the daily routine. *Graphics24* has a person on late-shift duty every week (from 11am to 7pm) responsible for updating all the weather maps mentioned above. The person updating the weather maps has less time to work on other graphics, putting additional time pressure on the rest of the team. During the week of observations in Johannesburg Participant 2 was on late-shift duty. To solve time-pressure issues (something that comes up often in the literature when examining graphics production, for example Usher 2013 and Dick 2014) Participant 5, a designer based in Cape Town, created a semi-automated system to update the weather maps, saving some time, as

these maps are very time-consuming (something I know from personal experience). There is now a system where a spreadsheet can be pulled into Adobe Illustrator to update minimum and maximum temperatures on the maps automatically. The *NetNuus* map and other information on the other maps, such as wind speed and weather icons showing, for example, cloud cover or rainy weather, need to be updated manually. Participant 5 and Participant 1 explained that the semi-automated process managed to free up some time for graphics journalists to work on new or "irregular" graphics.

All team members found the weather maps time-consuming and found them limiting their abilities to work on more interesting "irregular" graphics. The team tried to solve this problem with the semi-automation process, but it was clear that regular graphics are a constant and, apparently, irritating part of the daily graphics routine. Other work had to be planned around the "regular" work.

iii. Re-purposing of graphics

There were regular examples of work for other "clients" being re-purposed for use by *Netwerk24*, perhaps an indication of efficiency in the face of increasing demands from many different clients. An example was when, during observations, the team decided to resize a large graphic about Wimbledon for online use. The graphic was used in *Rapport* and *City Press* the previous Sunday, and was resized to read easily on a mobile screen. Participant 1 said he and team members often decide on their own to resize existing graphics for mobile use. These decisions are informed by the "exclusivity" of graphics:

> "Sometimes we create graphics for *City Press* or *Rapport* that are exclusively for them. These graphics cannot be used by others. They have other graphics though that are more general and those can be used by others. We sometimes adjust these to be used by *Netwerk24*."

Participant 1 informed an uploader at *Netwerk24* via Slack (collaborative software used by *Netwerk24* and *Graphics24* for communication and uploading of graphics) that there would be a new version of the Wimbledon graphic. The new graphic was also uploaded to Slack. Participant 1 explained that *Graphics24* use Slack for distribution and information purposes. This, in effect, removes another level of personal contact in the news production process and creates a reliance on technology for communication, possibly further cause for tension with *Netwerk24*. As is explored below, lack of face to face communication led to a good deal of tension between the graphics team and the news desk. Another example of a graphic being repurposed was on the Wednesday of observations, when Participant 5 in Cape Town sent an email (of his own accord) to the sports editor at *The Witness* in Pietermaritzburg (another "client"), suggesting a graphic about South Africa's cricket test series in England, which was about to start and thus newsworthy. The graphics editor was CC-ed in Participant 5's email to *The Witness*. He asked Participant 5 to send the graphic for translation into Afrikaans so that it could also be used on *Netwerk24* (see addendum 2).

This exploration of routines showed that the *Graphics24* team still follow fairly regular routines based on certain deadlines and the execution of regular daily work. Graphics for other clients were also re-purposed for use by *Netwerk24* as a matter of routine.

4.3.2 Factors affecting role performance

Reese & Shoemaker's hierarchy of influences guides researchers to take into account the many external factors that affect journalistic role performance and the construction of news, more so than the traditional gatekeeping models by White from 1950 and Breed (1955), with their focus mainly on the internalisation of institutional culture by journalists. Interestingly, in this study, the role orientations of visual journalists were sometimes informed by institutional culture, the idea of being a "service provider" for many clients as part of a greater institution was strong. But other factors also played a role in the performance of visual journalistic roles. This section explores levels of influence that include factors such as the mobile-first imperative, individual

agency, the shape of graphics and immediacy, and the influence these have on the performance of visual journalistic roles.

i. Mobile storytelling and mobile-first in practice

Observations and interviews generally did not appear to show a "mobile-first culture" in the routines and role practices of the graphics newsroom, informed by the urgencies, practical limitations (graphic size for example) and normative culture of the mobile news world. Although most participants agreed that mobile-first journalism is very important in the digital age, there was little evidence of a shared discourse creating meaning on what this means in terms of their journalistic roles, as suggested by Zeliser (2017) and Hanitzsch & Vos (2017), and how this should translate into creating mobile-first graphics, or practical expressions of a mobile-first attitude. From observations and through the interviews, it became clear that many graphics were still designed with a print-first "attitude". Some examples are mentioned above, namely the petrol price and bone marrow transplant graphics. There seemed to be a disconnect between the brief for mobile-first and the actual output, perhaps caused by a reluctance to leave the certainties of the print era behind. Despite saying that mobile-first is what informed work routines and outputs, it appeared that not all visual journalists were convinced of the process and always followed it in how they practiced their roles.

The team seems to be adjusting and adapting graphics as required for mobile use based on their own individual experience and outlook. Participant 4, for example, made an insightful comment about how graphics journalists adapt their output by reflecting on what they see online, showing the exercise of individual agency and autonomy, unrestricted by official guidelines.

> "Since many of us sometimes read news on the internet as well, we can see what changes need to be made in respect of designing for mobile consumption."

This was her personal view and the way she worked, and she acknowledged that others worked differently. Participant 5, for example, made a contrarian comment, something that observations in this study seemed to confirm: “Most of the time we first design a graphic for print and then adjust it for the web.”

It is clear that even within the team there is no consensus on how to approach mobile-first. They have not (yet) created a shared, *common* discourse on the meaning of mobile-first graphics that informs their practical roles. It should be remembered that the graphics team produce many different styles of graphics on a daily basis, and it seems as if the majority of their work for other clients is often print-first or even print-only (work for *Rapport*, *City Press* and the *Witness* for example). This overwhelming “print culture” appeared to affect how the team approached work for *Netwerk24*, despite being briefed to adopt a mobile-first strategy for *Netwerk24*, as confirmed by Participant 1:

> “All *Netwerk24* stories that come in go live online way before the print editions so the brief to all team members is that graphics should be designed firstly in the correct shape for mobile phones and then re-shaped for print editions.”

(The emphasis appeared to be on creating graphics in the correct shape, with little reference to the content).

Despite this brief, observations and interviews for this study identified little evidence of entirely new ways of storytelling relevant to a mobile-first or digital culture, as found by Usher (2014) at the *New York Times*. There was little evidence of a shared discourse about the shape and contents of, or journalistic norms for mobile graphics. Participant 2 felt the ideal shape and size for a mobile graphic is vertical and the same size as a mobile phone screen, in other words the entire graphic should fit on one screen. Participant 9, an editor, agreed with him:

> " As a user I don't want to read complex graphics on my phone that require zooming and scrolling, I want to see the graphic in one glance. I don't want to see a graphic that is larger than my phone's screen. I don't want to see a graphic that requires action on my side."

Interestingly, research at *Univision*, the largest Spanish language news site in the United States, proved the value behind this approach, most readers only look at the part of the graphic they can see on the first screen, where no scrolling is involved (Zafra 2017).

Participant 1 however had different views:

> "It might be possible to create graphics that are the size of a mobile phone screen, but it would be difficult with, for example, a long timeline or any other type of complex graphic. A graphic that could fit on a mobile phone screen in full would have to be tiny. If it's a complex graphic you cannot tell it on one screen".

The "small screen problem" appears to be the prime structural issue visual journalists deal with, but there seemed to be very little shared discussion among team members, and among visual journalists and word journalists, about how to approach this effectively, and how to decide what is appropriate (Hanitzsch & Vos 2017), with individuals generally following their own ideas. This appears to be rooted in the lack of clear graphics norms. Dick (2014) showed in his study of interactive newsroom in the UK that interactive norms exist to help guide journalists and visual journalists in selecting and designing interactives in the newsroom he studied. The absence of these "guiding norms" specific to mobile graphics at *Graphics24* seems to affect how visual journalists execute their roles, with many following their own ideas.

ii. Individual agency

All visual journalists showed a good deal of independence and individuality in their "construction" of infographics. Many referred to the existence of a style guide (not mobile-specific) but all visual journalists still showed individuality in how they approach designs, sometimes deviating from the style guide. Participant 4, for example, said her decisions on which colours to use were based on the style guide, but "colour psychology still applies, it's just a question of which colour would have the most impact and make the graphic easier to view and understand, for example red for hot, blue for cold."

It was unclear why this more stridently independent thinking and way of working exist in the team, as there were no obvious signs of interpersonal tension during observations, and there exists a style guide offering basic graphic design norms. It seemed as if each visual journalists simply felt quite happy working on their own and expressing their own "artistic freedom". Many light-hearted, non-news-related discussions did take place, but once they started working and designing, the visual journalists very much focussed on their own work, following their own methods, generally informed by the style guide for print graphics, but then following their own ideas for mobile graphics.

Other examples of individual agency include Participant 2's snake graphic and Participant 5's cricket graphic. They identified graphics ideas themselves and started working on these graphics by themselves, simply informing their editor of what they were doing. These graphics were designed for print audiences and were then changed into mobile graphics after intervention from the editor.

Participant 3 felt there was pressure from management to perform on mobile platforms. "Management wants to see that you produce, and they see that on mobile phones and on the internet." He experienced this as a factor inhibiting his individual agency.

Ryfe (2009) and Usher (2013, 2014) found that digital newsrooms appear to offer more room for the expression of individual agency. In the case of *Graphics24* there appears to be some expressions of individual agency, while in other ways the graphics team feel they are held back by the pressures of having to produce for mobile platforms, limiting their artistic expression and ability to work on large print graphics.

iii. Shape of graphics

The shapes of graphics affect how visual journalist go about designing these. Participant 3 and Participant 4 said their mobile graphic would be vertical in shape for easy scrolling on phone screens while Participant 2 said he often designs his graphics in modules:

> "These can easily be separated and reshaped to work in different formats, for example a graphic designed for print use could be four, separate, self-contained newspaper columns wide, and the same graphic could become one column wide for mobile by simply moving the four self-contained columns below one another."

This was his own way to achieve the mobile-first imperative with relatively little effort and time. Participant 5 said that mobile graphics needed to be much more concise with information and "focus on one category of a subject", therefore he designed mobile graphics with as little information as possible.

Participant 2 found mobile-first design limiting when he conceived interesting and unusual ideas for print, saying these ideas simply could not work on mobile phones because of the limited space. He thought mobile graphics are not quite as effective as large, printed graphics. His work on the snake graphic for print use, for example, indicates a preference for large, detailed graphics that he follows, where possible, in his daily routines.

Participant 3 agreed. He also felt mobile-first design can be "very limiting" because the shape of graphics for mobile phones is a deciding factor in what these graphics will look like and the type of information they will contain: "It has a negative effect on one's initiative to do large features because, all the time, you need to think about mobile output." He was not convinced that small, mobile graphics can be as effective as large graphics because "small graphics convey much less information and they are not visually as satisfying as large, printed graphics". Resizing large graphics to become vertical in shape, for easier reading and scrolling on mobile phones, is not a solution for him. "It becomes more like a scrolling project than something that offers reading pleasure." (The visual journalists often turn large, print graphics into narrow, very long graphics that can be read on mobile phones, but this often involves seemingly endless scrolling to view the entire graphic. See addendum 2 for an example.)

iv. Immediacy

Immediacy has been highlighted as a strong factor influencing the production of news in the digital era (Usher 2014). In this study, Participant 4 emphasised immediacy when designing graphics:

> "We are slowly moving on from print to a more digital, immediate content future. News are (sic) taking mere hours to break rather than days and so journalists need to adapt accordingly. When it comes to informing the public, things will have to be done quickly, which means stories and their corresponding graphics will need to be uploaded online almost immediately. The time for spending a week on layout and sending stories off to the printing press is slowly coming to an end. The public are becoming fast consumers of news and therefore they'll need a means to consume that news. Here, digital graphics are the answer."

This correlates with findings by Usher (2014) that immediacy has become part of the normative culture of journalists, although much work simply disappears in the depths of the internet.

Participant 3 and others also felt the immediacy of mobile-first had somewhat of a negative effect on their roles as journalists, they no longer felt able to produce large, intricate graphics because there were fewer opportunities for these to be published in print and less time to work on them. It seemed as if they were frustrated by the increasing pressure on their time and the inability to design large, detailed graphics with lots of information. Participant 2 also expressed concern over the "fleeting nature of mobile". He said it is possible to keep newspapers and look at them again at a later stage, while on mobile, "in five hours it is not relevant anymore" and some people might not even have seen it.

Observations and interviews appeared to show that visual journalists felt impaired in their role performance because of the mobile-first imperative. There was a feeling that mobile-first did not allow them to create the large, intricate types of graphics they were used to from print times, so they continued designing graphics for print consumption.

4.3.3 Infographics and the public

The public's perceptions of infographics are important to help guide visual journalists in creating infographics. There are few studies on audience receptions of infographics, and visual and print journalists in this study did not appear to have any real insight or empirical evidence into what the public wanted. They base their work on personal perceptions of what the public wanted, either to inform the public or to meet audience needs. This is a clear gap in the academic literature as will be explored in the conclusion, but also in the workplace, where this study shows there is a need for audience analytic systems and feedback loops at *Graphics24*.

i. Informing the public

In an era of fake news, and short attention spans, some of the participants believe that powerful graphics, that easily capture or explain a situation, could be useful news media tools. Participant 2's view summarises this belief in the power of infographics:

> "With infographics, there is a chance to break through the fear of fake news because a well-designed graphic will carry enough weight to stand out as something that is true. People will not expect you to go through so much hassle, to design something so detailed, to provide fake news."

Most participants agreed on the challenges of the internet age, immediacy and fake news, and on the fact that infographics can and should play a role in informing the public. Indeed, many saw infographics as an answer to the challenges of fake news and immediacy.

Participant 4 was of the opinion that graphics play a vital role in informing the public because when created for and seen on mobiles, graphics can be more easily spread:

> "You need only see the ever-rising popularity of memes and sharing culture to see that graphics are useful - and even required - when it comes to keeping the public informed. It's much easier to share a graphic on a mobile phone with say, a hundred people at a time instead of passing the newspaper around the train as people used to do."

Participant 1 agreed that graphics are very visual and therefore a very good way to tell a story quickly and attract the attention of users, unlike reams of text. "It plays an important role on that visual side."

Participant 9 also agreed that graphics had a very particular role to play in the public sphere:

> "Graphics are very powerful instruments to provide information and encourage debate. Let's say there is a debate about inequality … this will be presented best in a visual way, showing inequality in society."

She said the small screen on phones does not limit the effectiveness of information. "The medium will never limit the abilities of the Fourth Estate." She said even phones can fulfil that role, the information simply needs to re-packaged. "There is a need to think more creatively about spreading information but it can still be done on mobile phone screens."

Participant 3 argued that graphics journalists have an educational role, not just to explain the news to readers, but even in a general, educational way, about important topics. He said infographics are the ideal medium to help educate people, especially young people. He suggested designers would need to make a "mind switch" in the digital era, to be able to sift through information in much more detail (the gatekeeping function), so that they can select only the very essence of a story to be able to use that to design good, entertaining infographics. "I just need to look at my own children, they will always choose interactive information on a tablet or phone rather than printed information."

Some participants suggested the need to re-package information and think in different ways to create infographics that are still effective while using limited text and information. Participant 1 explained: "On mobile phones people want to see the news easily and quickly and that's why graphics can be so successful on mobile phones."

Participant 2 said he was sometimes surprised at simple graphics that were very well received by users that he did not find very interesting at all. He referred to a large graphic he had made before that showed the sugar content of soft drinks in terms of number of teaspoons of sugar per drink. The graphic was extremely popular and went viral in South Africa:

> "It's not a rocket science graphic but it talks to people on a level I don't understand. People seem to find it informative or educational, even though it was dead simple. Sometimes I spend days on a graphic and then you get no reaction. So now in my mind I decided that simpler is better."

ii. Meeting audience needs

Word journalists expressed an understanding of answering the needs of the market. Participant 7 emphasised the importance of providing audiences and the market what they want. For him the financial imperative, as directed by management, was very important, he pointed out that users want to see something special and unique behind the Netwerk24 paywall. "Readers need to be enticed to pay for subscriptions and graphics can play a big part in this." The tension between fulfilling the needs of the market (and "to make money") on the one hand, and the desire to be artistically creative, on the other hand, is an interesting indication of the different external influences affecting the practise of visual journalistic roles at *Graphics24*. Word journalists from *Netwerk24* are strongly affected by perceptions of the market, while visual journalists from *Graphics24* are informed by artistic norms.

The perceptions on what the audience wants informed the way of working and how visual journalists practiced their roles but most of this is based on what participants "thought" the audience wanted, they did not have access to analytics about infographics' reception. There is a need for academic and professional audience reception studies, with only one major recent study (De Haan et al 2017) examining and showing that audiences value infographics.

4.3.4 How to create graphics: Mobile-first norms

The lack of clear norms to design mobile graphics was a recurring theme in the study and affected all aspects of journalistic roles. Participants had a variety of views on what they

thought mobile graphics should do and what they should look like. There were often opposing views on this, or at least views on some kind of spectrum of ideas. Below are the norms that the observations and interviews uncovered.

i. 'Pretty' and 'integrated'

Participant 4 and others were aware of the need for user-friendly graphics that will not frustrate readers when they access them on mobile phones, so that they can fulfil their role to inform the public. On the visual and word side participants emphasised that graphics should be "pretty" and simple.

Participants, however, agreed that graphics should say something worthwhile and not simply present something pretty for the sake of being pretty. Participant 3 mentioned animated GIFs as an example. He said it would be meaningless to create GIFs just for the sake of adding some animation to a graphic if the "moving bits served no purpose". It should tell a story.

Participant 7 said graphics can also be *part* of visual stories, he referred to a visual story *Netwerk24* published about the Homo Naledi find, that was designed specifically for mobile phones as a package that included graphics, videos and images. "Our stories should be pretty, they should be integrated, they should be told in a way that is easy to understand." This was the only example that came up during the course of this study pinpointing an entirely new way of storytelling, as suggested by Usher (2014). Participant 1 also referred to this project and indicated that it took some time to develop, which restrains the team from regularly designing such integrated visual stories.

ii. Simple versus complex

Simplicity was one of the norms identified in previous studies (Lowrey 1999, Barnes 2016, McNamara 2017) and it is a recurring theme in this study. Participant 1 said a graphic should be

easy to read, with all the required data while being visually attractive. Participant 9 said a mobile graphic should be broken up into simple sections:

> "It should not be a large, grand graphic with a thousand branches. In my case, as someone who works with in-depth features, the ideal solution for mobile-friendly graphics would be to design several small graphics instead of one large one. They can then be used online and in print seamlessly."

Participant 7 suggested that, for him, graphics are a way to analyse and explain events for users in a simple way, because they are visual and therefore they enable understanding. "If you try to say some things that you can rather present visually in a graphic, it would be difficult to do and hard to understand."

Participant 7, socialised in a traditional newsroom, emphasised the value of infographics in informing the public sphere. "People care about what a story looks like. It is incredible what can be done on a mobile phone. Good journalism is not just text. Journalism can be practiced with graphics and videos and pictures." Participant 5, on the other hand, said mobile graphics are different from print graphics and cannot give a complete overview of a subject. He said a mobile graphic can add some "quick visual elements" to a story and should not be too text heavy.

This discourse among two participants, one a word journalist and one a visual journalist, showed two clear, separate tensions: Either graphics can add visual detail to a story without telling the whole story, or graphics can be thought of as something completely new, such as the Homo Naledi visual story, and tell the full story in a visual way. Salmén (2017) and others pointed out that there is still no clear answer in the industry on what mobile graphics can or should do. These results confirm this is the case at *Graphics24*.

iii. Meaning, narrative sense making and role of graphics

A topic that arose with many participants was about the "meaning" of graphics, about creating graphics that say something worthwhile and does not simply present something pretty for the sake of being pretty. All visual journalists agreed that their readers are "visual beings" and on the importance of information graphics. The imperative to "be visual" and produce for mobile was a common thread in all interviews. As shown above, on the one hand, some suggested graphics should be "pretty", but on the other hand, there needs to be "meaning". Visual journalists felt strongly about this concept of meaning, this was part of their professional socialisation, graphics are not meant to be pretty only, but need to tell a story. Visual journalists' views on the meaning of graphics are strongly informed by integrative norms such as artistic expression. Participants, including Participant 4, Participant 3 and Participant 5, pointed to only using "meaningful" content and images in graphics. There should be no images for the sake of decoration, all images should be part of the story. In their view, graphics are stories that should carry meaning, they are never merely illustrative. This is an interesting tension in newsrooms with anecdotal evidence showing word journalists often think of graphics as mere illustrations. Participant 1 explained that he still sometimes needs to explain to word journalists what graphics are: "They should tell stories, they are not just pictures".

4.3.5 Structural and institutional issues

These issues relate to Reese & Shoemaker's (2016) updated hierarchy of influences levels looking at organisational and institutional issues, as well as the issue of the larger social structure, and how this affects journalistic roles. In this study, these issues appeared to be a source of great conflict and in many cases the conflict remains unresolved. Questions of whether the graphics team should remain separate or whether they should be reintegrated into the main newsroom dominate the structural and institutional level. The question of *Graphics24* being separated from the main news desk and operating relatively independently was seen as

one of the main structural limitations from the side of the news team in the graphics production process.

i. Separation or integration: An ongoing tension

There was a clear division between the word and picture people in formulating their own perceptions of their normative roles as journalists. The word journalists have been socialised in newsrooms where all team members interact on a regular basis and work together regularly, while the graphics journalists have been socialised in a separate newsroom where they make their own decisions, apart from everyone else. The graphics journalists felt strongly about this autonomy and this affected how they thought about their roles.

Word people desired closer integration. Participant 8 said the newsroom of the future is a totally integrated newsroom, where everyone sits together because everything is immediate. "Everyone needs to be part of every discussion and every story." Her view was informed by newsroom discourse on convergence, and the fact that the *Netwerk24* newsroom is already a converged newsroom, bar *Graphics24*. Participant 9 agreed and said to her the graphics team feel like a service provider, "like IT or the library":

> "They don't feel like part of the news structure. There would be more cooperation if the team felt more like a part of the news team. They are hidden, you don't see them. They are not at the diary meetings, they do not participate in any email conversations, they are completely separate. We forget about them."

Participant 1 countered that the team needed to remain separate because of their wide client base:

> "We need privacy because we work with many different clients, sometimes on confidential projects. *Rapport*, for example, can be very sticky about their stories and graphics. They are separate, they want to keep their stories exclusive."

On a practical level, Participant 1 explained how this separated graphics newsroom works (as was already discussed under routines above). When Participant 1 receives graphics requests by email from various origins (journalists, editors, the designers themselves) he sources the information from reporters, assigns the graphic to a visual journalist and then discusses the concept and the type of graphic with the designer. He said he also sifts through diaries to try and identify some graphics. Then he communicates via email with news editors or reporters about some ideas. Some designers also initiate their own designs. All this happens in a "bubble", in the graphics newsroom, without personal input from the newsroom. All decisions are made based on what graphics journalists think would be the best ways to construct graphics. Only after designing, the graphic is sent back to the reporter for checking and once they are satisfied, it is sent to the subs for grammar and factual checking. The final graphic is then uploaded to Slack and to Eidos (the print CMS). The word journalists do not find this working process satisfactory.

ii. Graphics24 as an 'agency'

This work process underlines the separateness of the graphics newsroom, based on their perception of *Graphics24* being similar to an "agency" that should operate on its own terms to service all its clients. This view has been shaped by economic realities, the team generates its own income, and practical realities, having to "serve" many and varied clients equally. The question of time is often used as a reason for being unable to discuss each new infographic's design process and concepts with word journalists or editors. However, in some cases, such as special projects or large graphics, they are discussed and constructed with the involvement of all parties, including word journalists and editors (This is an insight I have from past

experience). This is the exception and during the observation week for this study it did not happen once. There was a distinct discourse among members of *Graphics24* that they are different from all other newsrooms and should continue to operate in the way they do, with Participant 1 and various other participants emphasising the need to be separate to be able to do their work "for all their clients" fully.

The fact that the graphics team see themselves as a service provider shows a clear difference in the normative and narrated roles of graphics journalists between the two "sides". Word journalists needed them to be more involved in the "newsroom of the future", graphics journalists did not see anything wrong with "providing a service". They were, mostly, not professionally socialised in large, busy, converged newsroom and have a different outlook on how the news should be produced, because many of them are, originally, not "traditional" news people. They have not been influenced by the fast-paced world of the *Netwerk24* digital newsroom during the past number of years because they are not part of it. Participant 8, on the other hand, someone who is part of the discourse of immediacy in the newsroom, said there would be more cooperation if the graphics team felt more like a part of the news team.

iii. Interpersonal relations

Participant 9 suggested that interpersonal relations have a very strong effect on the practice of journalistic roles, a view that was formed as part of a newsroom discourse, where people work very closely together all the time. She referred to a graphic designer who had since left the team, explaining she and this person used to have a very strong personal relationship. Even when the integrated graphics team was formed, Participant 9 said she still discussed graphics ideas with this person on a personal level and this helped them formulate ideas. She said the formal "channels and structures" in place now do not allow for this kind of personal relations and spontaneity. She now needs to follow rigid structures, send an email with a formal request, wait for a response, and the resultant creative output is not always as satisfying as when the

process was less formal and more personal, with more participation by the journalist in the design process:

> "In the past, we brainstormed together. Graphic designers were involved with almost every in-depth article, and they were involved in the process from the start, the journalist and the graphic designer were briefed together by the voices editor at that time. The difference this makes is, then, you have a relationship with that person. It is a much more natural process when people work closer together and conceptualise together."

Participant 7 agreed, saying graphics journalists, news editors, coding people should all be integrated, so that all these groups can participate in the decision-making process. He said the current system is very old-fashioned:

> "The news people come together and decide on stories and graphics ideas, and then contact graphic designers to discuss their ideas. This is the wrong way round. Those people need to be here, they are the experts, they will see ideas and pitch graphic story ideas."

Participant 1 said in the current system there are indeed journalists who do come and talk to the graphics journalists but he agreed closer integration might improve this and lead to more cooperation.

iv. Reintegration

Some graphics designers were once integrated with newsrooms but few remembered this or referred to this in the study. The visual journalists now legitimise their separateness through

their own discourse of separateness and being a service provider, a way in which they give their roles meaning, to serve all their clients.

Participant 8, however, said structurally there is sufficient infrastructure to accommodate *Graphics24* in the same space as the main news team. She gave another example of the impediments she experiences in the production process because of the separation. She said often when there is breaking news, she would call everyone around her together and plan a story. If there is nobody from graphics nearby, they are often forgotten and the graphic is simply forgotten. This explains a problem Participant 1 raised, that sometimes the graphics team simply do not get any requests for graphics and conforms with Dick's (2014) finding that administrative arrangements play a big role in the quality and type of work that is being done.

All interviewees on the word journalist side were in favour of reintegrating graphic artists in a physical way with the news desk because this was how they understand news to be produced. This was informed by their understanding of the new journalistic norm of immediacy and the imperative to produce news quickly for mobile consumption.

Participant 8 said the only valid problem might have been infrastructure in terms of seating space, but there is enough seating space available in the main newsroom:

> "Physically there is space. Separating the graphics team, with some, for example, sitting at *Rapport*, some at *City Pres*s, some at *Netwerk24*, would create further problems. Designers would then become pigeon-holed and eventually become separated from other clients, focussing only on the client where they are physically sitting. It should be a much more natural process, with graphic designers being part of the main news team so that everyone knows everyone."

v. Diary meetings

Regarding attendance at diary meetings, a requirement for further integration from the word side, there was a difference of interpretation between the word and visual people, with visual people not seeing the need to be part of the diary meetings.

Participant 1 said he does not attend the *Netwerk24* meetings:

> "But I find even when I'm attending, it's not that it always … whether I've got the diary list in front of me or whether I'm there, I can still, the same suggestions will come up. When I send graphics suggestions to news editors, on most days there will be a quick response with confirmation. This is sufficient."

Participant 9, Participant 8 and Participant 7, all word journalists who developed their professional identities as journalists in circumstances where diary meetings were part of the day-to-day practice of their journalistic roles, disagreed. Participant 8 said morning diary meetings are where options to best display stories for readers are discussed and the graphics team "must become part of those meetings":

> "The video journalists for example attend all morning diary meetings. It makes a major difference to see someone at the meeting. If the graphics team were to attend the dairy meeting it would also give the news team an idea of how much time the graphics people have on a certain day. This would improve planning."

Participant 9 said the explanation from the graphics side, that they do not have time for meetings because they have so many "clients", is not particularly valid. "Meetings are one of those things. If you ask anyone, they will say they don't have time for meetings." Participant 7

said visual stories are increasingly important and that is why the inputs from a graphics editor are required at a news diary meeting.

Participant 1 was not convinced of the need to attend diary meetings:

> "The diary meeting might be a problem in terms of time, my work day runs from 10am to 6pm. The diary meeting is at 9am. I would prefer to be in the office later in the day when everything is being finalised. But some other designers might be able to attend the diary meetings."

There was clearly no agreement between the two sides on attendance at diary meetings. Word journalists felt strongly about the value and the need for graphics journalists to attend in order to really offer a mobile-first service and become part of the production process, while visual journalists emphasised time constraints as a factor impeding their regular attendance of diary meetings.

4.3.6 Communication and conflict

Communication issues were mentioned often, most of these rooted in structural or institutional problems, with the issue of the separate graphics desk being highlighted by the word journalists as the main reason for the communication issues.

i. Forgotten graphics

Participant 1 highlighted a recurring structural issue on graphics being "forgotten". Stonbely (2015) showed how routines in a newsroom determined the type of news. This is illustrated by the issue of graphics being "forgotten". The *Netwerk24* team work fast and upload live stories constantly, while the graphics team work at a slower pace, meaning often graphics do not even make it to the website. To Participant 1 this was an organisational issue. He reasoned uploaders

did not know about the graphics or graphics were not attached to the correct stories in the CMS. Participant 1 said there had been times when graphics were not uploaded with stories on the website, when they had to "chase it up":

> "As soon as a story is ready it has to be uploaded to the website immediately but graphics take longer to create. Often the graphic will not be ready at the same time as the story. Graphics cannot be rushed because then they will be sub-standard."

This is one of the main structural problems also highlighted in the literature (Usher 2014, usher 2013, Ryfe 2009) with news graphics because of the new news value of immediacy (Usher 2014), they take time to create and therefore do not move through the process as fast as word articles.

Participant 8 confirmed the need for immediacy, explaining that there are so many stories at a time, stories move and are uploaded fast, while the graphics team work on a different, longer timeline and then sometimes graphics fall by the wayside. She said the solution would be if the graphics team were nearby, then someone would simply be able to shout "here it is, upload now". Participant 7 also said the problem with graphics not being uploaded on time was because stories move faster than graphics. He said it could be solved with better communication. He said sometimes there are very fast stories, so if graphic designers were closer to the news team they would be able to plan better and they would be able to follow the process. Participant 7 said, for example, if there were a breaking news story, that could be uploaded without a graphic, immediately, but the follow-up story, an hour or so later, could be uploaded with a simple graphic. That gives the designers a bit of time to design something. He said to enable this kind of workflow, graphic designers need to be part of the news desk.

ii. Conflict caused by separation

The main cause of conflict appears to be the separation of *Graphics24* from the main newsroom, what appears to be one of the most important findings from this study. As shown above, the *Graphics24* team have given meaning to their roles in a discursively narratively different way than how the word journalists have given meaning to their own roles and those of the graphics journalists. The existence of a different discourse in the graphics newsroom to that in the main newsroom shows these two groups do not agree on the roles of visual journalists. The graphics team would like to remain "service providers", the word journalists would like to see the graphics journalists become part of the main newsroom and participate in the daily news production process fully. Because the two sides do not agree on this, there is continual conflict.

There is clear tension about exactly where the graphics team belong in terms of official structural organisation. Many of the questions about where the team should sit in terms of physical space arise from the fact that they work for many different clients and how this affects *Graphics24* team members' perceptions of their own roles. Participant 8 feels, as the team report to *Netwerk24* (in terms of salary payments, staff affairs and organisation), they should simply sit with *Netwerk24*. She said because the graphics team are separated from the main news team the use of graphics at *Netwerk24* is not as effective as it should be: "There is not enough exploration of infographics on phones and that there is room for much more experimentation."

Participant 1 expressed some fear that sitting with *Netwerk24* would be unfair to other clients:

> "There has always been that issue, do we belong to them or do we belong to them or do we belong to everybody?"

Participant 8, on the other hand, said they can still do work for other clients, while being more integrated with the *Netwerk24* team:

> "*Netwerk24* encompasses the three Afrikaans dailies, namely *Beeld*, *Die Participant 7* and *Volksblad*, so if the graphics team were seated with the main *Netwerk24* news team they would service three clients closely. "*Graphics24* are not an island. And I get the island feeling."

Participant 1, in a follow-up interview, contemplating where *Graphics24* belong, expressed initial surprise at the comments from Participant 8, Participant 9 and Participant 7 above about the separateness and "island mentality" of the graphics team, and the fact that the graphics team are not part of the daily news process:

> "The graphics team deal with people from all over but I understand that there is a sense of being cut off from the news team. If it's going to make life better I will not have an issue with moving to the main news team. If it's going to help with feedback for the graphics team it would make sense for them to sit with the *Netwerk24* people."

But he continued that he was not sure whether closer integration would solve some of the problems *Graphics24* still encounter, such as the CMS not displaying graphics correctly.

iii. Conflict because of commitments to shifting to mobile-first

The issue of mobile-first graphic design also created some conflict. Although the official policy at *Graphics24* is a mobile-first one, many team members still seem to design their work for print first and then re-shape them for mobile use. There seemed to be an attachment to traditional print processes. Participant 1 said long-term projects are an exception because they are usually designed with print in mind and then re-shaped for mobile use, but for daily

graphics “it has to be mobile-first”. This did not always appear to be the case during interviews of observations.

Participant 9 said she got the impression that unless a journalist requested a mobile-first graphic, the graphic team would produce something for print first and then it had to be reshaped for mobile:

> “It is sometimes surprising that graphics would be designed for print use, when the policy is mobile first. As voices editor, I work very closely with graphic designers because many of my pieces need infographics or illustrations. I have experienced cases where graphics were designed for print-first, and as soon as I received the final version of the graphic I realised it would not work on mobile phones because the shape was wrong. Then I contact the designer to change the shape of the graphic for mobile use.”

iv. Internal conflict

Participant 2 exposed some internal conflict within the graphic team. He was very frustrated in his lack of training to create proper mobile graphics, while “others” are able to experiment:

> “It does not help that only some can experiment with this and do it successfully while some of us fall behind because we do not have a basic background to do that. This is a frustration for me. You want to do it but you don’t know how.”

He suggested that “someone” should guide and train the team to create mobile-first graphics by helping them start with smaller graphics and in that way encouraging everyone to keep learning.

It appears as if conflict on many different levels impede the performance of visual journalistic roles on a mobile-first level. The word journalists emphasise the importance of mobile-first work, while visual journalists maintain that they have many other functions apart from mobile-first work for *Netwerk24*.

4.3.7 Technology

Technological changes and shortcomings have always influenced journalistic roles (Reese 2016, Usher 2014, Vobič 2011), and this study is no exception. Visual journalists expressed frustration with changing technology and observations showed gaps in technology.

i. Gaps

There were some technological gaps in the design process for mobile graphics, with some visual journalists suggesting they needed more skills, and observations showing a lack of availability of some necessary programs. Graphics journalists, for example, did not use any programs commonly used in other graphics newsroom in Europe, the United States or South America (often called mirroring software, these programs show a live view of graphics on mobile screens while they are being designed) to help them design graphics for mobile phones. They mostly improvised in their own ways. Participant 4 said she would test designs for mobile phones by looking at her graphic on her own phone. Participant 1 also said he would test the look of graphics on his wife's old iPhone, it has a small screen and he finds this ideal to see if the graphics work on a mobile screen. This is a technological, structural limitation, the mirroring programs are available (at a cost) that would provide designers a real-time view of their designs, while they are working on them.

ii. Changing technology

Participant 3 felt challenged by changing technology, especially web-based software, and changing programming languages. (The *Graphics24* team use Adobe Creative Cloud for all design purposes.) He said because of coding problems, and because of the limitations of the small screens of mobile phones, the idea of interactivity in graphics has "blown over". Participant 2 also mentioned the issue of technological limitations, he felt that team members are not able to design graphics that are responsive (i.e. the shape and display changes when one turns a mobile phone vertically or horizontally) because the *Netwerk24* CMS does not support responsiveness. He found this a severe limitation to designing effective graphics. He also said he was frustrated by the "lack of training" for graphic designers to properly exploit the possibilities of mobile-first graphic design. He expressed a need to learn "basic web skills" such as HTML and PHP (Hypertext Pre-processor), and the need to use these skills daily so as not to "lose them" again. Participant 3 said "the whole world" is moving to "screen-based output" and he made a passionate plea for more animation, or moving graphics. He is the only team member with the technical skills to create original animations, yet there are time and money limitations, generally preventing him from using this skill. He said there are serious time challenges with regards to animations because they are very time consuming.

iii. CMS problems

During observations while showing me some graphics that had been used on the *Netwerk24* site, Participant 1 noticed that in some cases the resolution on these graphics appeared to be too low. This appears to be a regular structural problem due to technological limitations. Images and text appeared pixelated. There was a graphic about a murder scene that was unreadable online because the text was too small (see addendum 3). He immediately set out to write an email, requesting that the problem be fixed, to the developers and the head of digital at *Netwerk24*. He explained that the (in-house) content management system (CMS) appeared to automatically reduce resolution on some infographics when uploading graphics to the

website. He explained that infographics were uploaded to Slack (collaborative software that is used extensively by *Netwerk24* for communication and content management) with good resolution but once these graphics appeared on the website, in some cases, there was clear pixellation. Several weeks later when I returned to do some follow up interviews (in August) this problem had not been resolved yet. Participant 1 said the developers did not respond to his initial or follow-up emails. He said this was a frustratingly regular problem he encountered when trying to communicate with the developers about technical issues, affecting the type of work the graphics team could do negatively because they always had to keep in mind technical issues.

The Thursday of observations delivered some more technical problems. The Afrikaans, mobile-friendly version of the cricket graphic that Participant 5 had worked on the previous day was uploaded to the *Netwerk24* site but did not display correctly. When a desktop user clicked on the graphic it popped up to the middle of the screen, filling the screen from top to bottom, and it became impossible to read, the displayed version of the graphic was simply too small. It did display correctly on mobile phone screens. Participant 1 explained that this was a problem with the CMS. There are pre-set placeholders that force images into certain sizes. Participant 1 said he had asked the *Netwerk24* developers to change this but they claimed that it was very hard to do. This was a similar problem to the pixelation issue discussed above, showing a disconnect between the website developers and graphics journalists, causing frustration for the graphics team. It seemed as if technical problems were holding them back from creating the types of graphics they wanted to.

The issue of technology is a structural influence that affects visual journalistic roles, with some visual journalists in this study suggesting that technological limitations are holding them back in the practice of their roles. It is beyond the scope of this study to examine technological problems in detail but this is a structural issue that clearly affects how news is produced and merits further research.

4.4 Conclusion

This study employed immersive ethnography and semi-structured participant interviews to explore journalistic role perceptions and performances at *Graphics24*, and their interaction with journalists and editors from *News24*. The theoretical model employed aimed to identify the discursive construction of visual journalism in a mobile-first environment, as it was influenced by hierarchical factors affecting role perceptions and performance. The study also examined norms use in the production of visual news.

Findings were somewhat surprising in a newsroom that purports to be a mobile-first newsroom. Practical roles and routines at *Graphics24* have generally not evolved into "mobile-first roles". Despite most participants purporting to practice mobile-first journalism in interviews for this study, triangulation by means of observations showed this was generally not the case. This was influenced by varied and differing factors.

Not one clear, consensus-driven discourse (Zelizer 2017) on mobile-first visual journalism was identified, but rather, two distinct discourses influenced the role perceptions and practices of study participants, causing much tension and conflict. Word journalists as a group (the three editors who participated in the study) and graphics journalists as a group (the entire graphics team) each shared, within their group, their own, distinct interpretations of the mobile-first environment. These interpretations were based on the factors affecting their respective newsrooms (Zelizer 2017). The graphics people interpreted their roles in such a way that they perceived their roles as being to "serve" their clients, while word journalists had a more traditional normative interpretation of visual journalistic roles in terms of serving the public sphere, influenced by the new news values (Usher 2014) of the digital age. The difference in views between the word and visual journalists are mostly based on different interpretations of external and internal factors affecting these roles.

These external and internal hierarchical factors affecting the conceptualisation of visual journalistic roles include, among others:

- Routines: Visual journalists followed a daily routine still somewhat based on print routines, with fixed diary times, fixed patterns of work and fixed deadlines, while word journalists were more fully integrated into the digital routines of immediacy and speed.
- The imperative of mobile-first storytelling: Many visual journalists still followed a print-first attitude, only changing graphics into mobile shapes after first designing for print. Visual journalists felt challenged by the need for speed and immediacy, seeing this as a barrier that removed their control (Usher 2014) to create and tell visual stories in ways they deem best, while word journalists emphasised the importance of these new journalistic norms in a mobile-first environment.
- Perceptions of the audience: Both groups highlighted the need to inform the public through graphics. Word journalists emphasised offering value to the public through infographics, showing the importance of market factors, while visual journalists emphasised offering readers information graphics that look good while disseminating some information.
- There was an apparent absence of clear visual norms specific to mobile graphics, with the existing style guide focussing on printed graphics and most visual journalists following their own work processes and artistic norms to create mobile graphics.
- Technology: Lack of training and continuing problems with the CMS held visual journalists back in their creation of infographics.

In defining the roles of visual journalists, word journalists were and are socialised in a fast-moving digital newsroom, being affected by factors such as immediacy and speed, and they expected graphics journalists to share their concept of visual journalism as part of mobile-first news production, meaning closer integration, more speed and immediacy. Graphics journalists, on the other hand, were (and are), mostly, not professionally socialised in the large, busy, converged newsroom of *Netwerk24*, and had a different outlook on how they should practice their roles. They were strongly influenced in this view by an overriding institutional factor: The *Graphics24* newsroom was created as a separate, distinct, autonomous newsroom, with its main purpose being to serve a wide variety of “clients”, namely other news media in the group

and other departments in the company. On this level the separation of the graphics team in their own private space was one of the main causes of tension between word and visual journalists. This led to many issues related to communication and daily planning, with the graphics editor's lack of attendance at diary meetings and participation in the daily news process being particularly important issues for word journalists. This concept of being different continually informed the discourse among the graphics journalists of being "service providers" rather than mobile-first journalists. Visual journalists were strongly influenced by what they perceived as their roles within a larger institution. They often justified and gave meaning to their roles by referring to the greater institution (Media24) and the importance of serving their varied clients.

There was some agreement between the two sides that everyone's normative role is to inform the public as accurately as possible. But apart from this agreement, both groups appeared to have been socialised separately and distinctly to the roles of visual journalists by being exposed to different meaning systems, thereby creating separate discursive identities (Hanitzsch & Vos 2017), leading to much tension between the two sides. This appeared to limit the practice of visual journalistic roles in the mobile-first way desired by the word journalists.

CHAPTER 5

CONCLUSION

5.1 Contribution to the literature

As outlined in the introduction, there is a paucity of literature on the production of visual news, as well as on the roles of visual journalists, with only a handful of studies examining similar themes globally, and none, to the best of my knowledge, in South Africa. This study has aimed to help fill a gap in the literature regarding visual journalistic roles, specifically the roles of infographic journalists working in an environment with some focus on mobile news consumption. In the digital era where news is increasingly consumed on smartphones the question of how mobile-first design has affected the roles of graphics journalists is a relevant and important one, that also has implications for other types of journalistic roles in newsrooms. There is a need for an understanding and "thick descriptions" of journalistic role perceptions in this mobile-first era to help show how journalists are negotiating the demands of the fast-moving times to give meaning to their roles, and to show how this affects the production of news. This study helps provide an initial starting point for further exploration of this topic, a relevant and important one for the newsroom of the future. It adds to academic literature on the subject but could also help provide some guidance to practitioners on how to negotiate the fast-changing digital news landscape, with a focus on visual journalism specifically.

5.2 Notes on qualitative methodology in the digital age

Despite the challenges ethnographic studies present, specifically in a digital newsroom, an understanding of visual journalistic roles in a digital age can still sometimes be reached through ethnography within a qualitative framework, as this study showed. There are still some physical newsrooms, even in the digital era. One challenge often cited in the literature when examining digital newsrooms is that news is no longer produced in a single newsroom space but often co-produced by users. However, this study found that there are still instances where news, and, specific to this study, infographics, are produced in a traditional newsroom space, where

journalists still rely on routines to do their work. This makes ethnographic immersion as method still useful and relevant in the digital era, in some instances. On a methodological level, the study therefore helped answer questions as to the relevance of "traditional" qualitative methodologies in the examination of digital newsrooms, a prominent question in the literature. This study showed these methods can be useful where physical newsrooms still exist, as with *Graphics24* and *Netwerk24*.

5.3 New theoretical models to examine journalistic roles in the digital era

The digital era has also brought about a questioning of theoretical models to examine these changing roles. In this study, the aim was to identify the discursive construction of visual journalism while considering external factors as identified by the hierarchy of influences model, a model that allows for many external factors to be taken into account when examining how journalists perceive their roles and produce the news. It is a model that is useful in the digital age, where journalistic roles are arguably influenced by an even wider variety of factors, and where journalists constantly redefine these roles because of constant changes in the industry and in society. The study showed the hierarchy of influences model and the discursive construction of journalistic roles model offered much useful guidance to identify different levels of influences on the role perceptions and practices of visual journalists.

The theoretical models employed provided deep insights into the roles perceptions and functions of graphics journalists in the production of visual news.

5.4 The discursive construction of visual journalistic roles at *Graphics24*

The aim of this study was to understand how and if journalistic roles at *Graphics24* have changed in a digital, mobile-first environment, in the context of their work for *Netwerk24*. It showed the existence of new news values in the *Netwerk24* newsroom, affecting how word journalists viewed visual journalism and their own roles. Because the graphics journalists are seated separately, they were not affected as strongly by these new news values.

Two distinct discourses were identified, with word people giving meaning to their roles and those of visual journalists through traditional normative concepts of journalism, while having "updated" their discourse and redefined their roles because of new news values such as immediacy and answering the needs of the market. This does not exclude "traditional" normative values such as offering a public service, autonomy, being free and independent and being watchdogs. The visual journalists examined in this study, on the other hand, gave meaning to their roles through a distinct discourse of being graphics "service providers" and being "different" from all other newsrooms in the Media24 organisation. The visual journalistic discourse on their roles has been informed by a desire to serve all their clients internally in Media24 equally, and by the institutional reality of being a separate "graphics agency". This is because their clients have very different expectations, with some clients still expecting "traditional" print graphics.

The mobile-first imperative at *Netwerk24* is but one of many expectations from the graphics team. There appears to be no urgency to be mobile-first graphics journalists. There is also no single discourse within the graphics team on norms for producing mobile-first graphics. Often discourse also appeared to be reflexive, with all participants having thought about the concept of visual journalism often and having formulated their own ideas, but the study showed that this reflective discourse was not always shared among either team members of *Graphics24* or in the wider *Netwerk24* newsroom.

The study adds to literature on the discursive construction of journalism in the digital era, showing that journalists constantly reimagine their roles by discursively reflecting on these roles in a changing media environment. With newsrooms becoming increasingly de-localised, a theoretical model looking at the discursive construction of journalistic roles offers a relevant and useful way to examine these changing roles in an environment where newsroom boundaries are becoming less clear. The two distinct discourses that arose stand at the root of most of the tensions between the two sides that this study uncovered.

These tensions and conflict arise because word journalists perceive the current practicing of visual journalistic roles as being inefficient in the mobile era. Editors at *Netwerk24* have an economic imperative to offer users a unique experience behind a paywall. They see infographics as an essential part of this experience and desire closer integration with the graphics team to achieve this. There is a perception from the *Netwerk24* side that graphics journalists cannot fulfil their roles as mobile-first journalists while being seated separately from the main newsroom and focussing on so many other clients.

These results suggest that *Graphics24*, *Netwerk24* and newsrooms elsewhere may consider closer integration in order to create mobile-first newsrooms as much tension and perceptions of ineffective routines appear to be caused by unnecessary separation. Convergence comes with its own set of tensions, in the case of word and visual journalist as in this study one might also expect to find different perceptions of routines and roles, but this converged space might still, arguably, lend itself better to the more efficient practice of visual journalistic roles in a mobile-first environment.

5.5 Individual agency vs rigid structures

The question of individual agency and how journalist mediate restrictions in their production of news is a pertinent one and has been explored extensively in the literature. In this study there were clear indications of strong individual agency from the side of visual journalists. Issues of individual empowerment were more prominent on the graphics journalists' side, with more exercise of journalistic agency, probably somewhat facilitated by the separateness and autonomy of the team. It is easier to be individualistic in the absence of strong structural or organisational restrictions. But this individuality is viewed with distrust by word journalists, who see it as a barrier to really become mobile-first.

Visual journalists were very protective of their separateness and subsequent "freedom" from being tied to rigid structures in the larger newsroom. They preferred to practice visual journalisms in ways they deemed fit, based on their own normative and cognitive interpretations of their roles. They developed their own set of routines and structures to create infographics. On the "word" journalism side there were fewer expectations of personal

“freedoms”, with rigid diary meeting times, strict expectations of what graphics should do and what they should look like, and strict expectations of how these graphics should be created. The greatest expectation was that visual journalists should become part of the main newsroom in order to deliver the most efficient service to create mobile graphics. Visual journalists were not in favour of this integration with the main newsroom, giving the imperative to equally and fairly serve their long list of “clients” as the main reason. It is likely that closer integration with the *Netwerk24* newsroom would dilute the individual agency of the visual journalists and this was probably the main reason, albeit unstated, that deterred them from agreeing to closer integration. This study showed in order to practice real mobile-first visual journalism there would be a need for closer integration between the two teams, inevitably leading to a certain loss of individual agency on the side of the visual journalists.

5.6 Mobile-first visual journalism

Despite all participants saying that they practice mobile-first journalism, practical results showed this was not generally the case.

Many of the visual journalists continued to work with a print-first mind set, often preferring to work on large, detailed print graphics instead of working on graphics firstly and primarily aimed at mobile use. There were no clear norms for mobile-first graphics, with the style book focussing only on printed graphics. Interviews with Participants 2 and 5, for example, showed a desire to continue working with printed graphics, as they felt they could express themselves better in an artistic way while designing these kinds of graphics. Participant 2 said he did not expect printed newspapers to disappear soon, implying that there was no immediate need to move to a mobile-first mind set yet. Senior editors from *Netwerk24*, however, disagreed with this and were frustrated by the lack of urgency to develop mobile-first graphics. The practical limitations of designing small graphics for smartphones appeared to be a real impediment for visual journalists, contributing to the prevailing graphics newsroom discourse of mobile graphics as an afterthought to printed graphics. This is a challenge in the larger newsroom context of *Netwerk24*, where the desire for mobile-first output is stong. This study confirmed

what similar studies found: Print routines continue to persist in some digital newsrooms, despite the desire for newer, yet to be developed routines, more suited to the digital age.

It is probable that visual journalists continue to practice their roles in the traditional print-informed way because it is convenient and well-known. Change is not easy to negotiate. Combining the two teams might help create a new, single discourse where the mobile-first imoerative could become stronger for the visual journalists, as it already is for the word journalists.

5.7 Limitations of the study

It is a limitation of this study that it does not refer to many audience studies on the reception of infographics on mobile phones, because there are so few. It is a premise of this study and all participants that audiences are interested in infographics. All participants adjusted their work methods and outputs based on what they *thought* audiences wanted. This was not based on any real feedback or analytics from audiences. There is a strong need for literature examining audience needs and reception of infographics. This would validate, or not, many of the perceptions on what participants *think* their users want, as expressed in this study.

Another limitation of the study is the unique set-up of *Graphics24*. It is acknowledged that this is a very focussed study and *Graphics24* is not representative of all visual, digital newsrooms. The fact that they "serve" a very wide variety of clients has a very strong effect on how participants view and perform their roles and strongly influenced their normative views. Their situation is, perhaps, somewhat unique, by being a "service provider" to many internal and external clients. This necessarily affects their roles perceptions. Their unique position needs to be seen against the imperative of economic sustainability, a reality all newsrooms face. But the current *Graphics24/Netwerk24* set-up appears to have a negative effect on the practice of mobile-first visual journalism.

This begs the question whether it makes journalistic sense to produce infographics in an "agency" type setup such as this one in a mobile-first environment. The question of what would

be the most efficient way to produce mobile-first graphics in a newsroom could be explored in future studies.

5.8 Further research

There are some gaps in the study and much room for further research. The study merely touched on the effects of visual journalism on "word" people, as the focus here was on the visual journalists themselves, leaving a gap in the literature that could still be explored. With visual, digital journalism appearing to be a strong trend for the future, the perceptions of word journalists about visual journalism and how this affects their own roles might be fruitfully examined in future studies.

The role of data journalism in visual journalism is also an unexplored topic that offers much room for further research. How does the practice of data journalism affect the production of visualisations in the graphics newsroom and the roles of visual journalists?

Further scholarship could also fruitfully continue exploring tensions in newsrooms regarding the production of mobile-first news in general, as the shift to mobile-first newsrooms is still happening and roles are still, constantly being defined. A study of a graphics newsroom with a more limited brief (i.e. one that does not have as many "clients" as *Graphics24*) may yield more positive evidence of a developing mobile-first culture. It is likely that other visual newsrooms will have very different normative outlooks and the outcome of a similar study in a different setting will, conceivably, be very different. A study of a graphics newsroom servicing only one main client, might yield different and interesting results. Future studies may also look at visual journalistic roles in already converged newsrooms, where graphics journalists are part of the main newsroom, and the effects this might have on their roles in a mobile-first environment.

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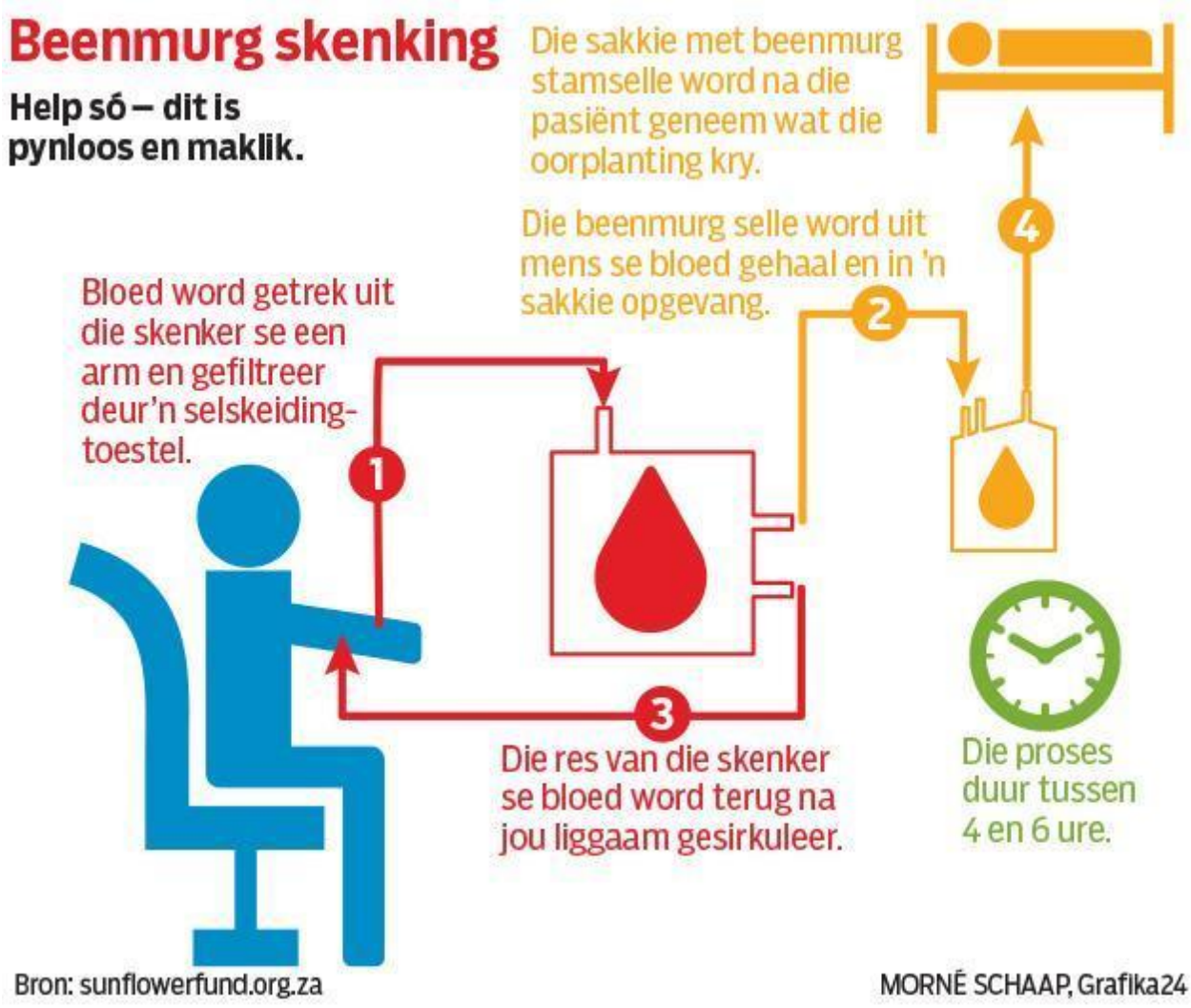
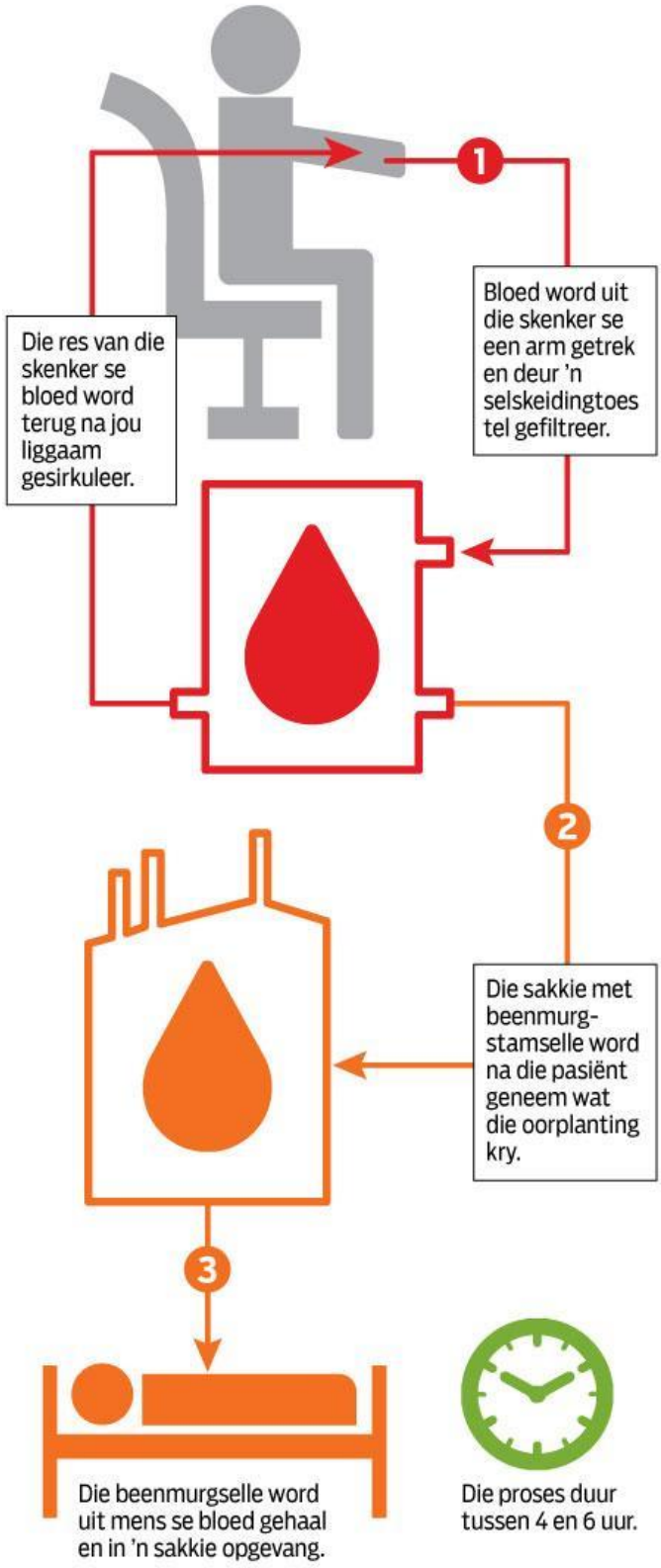
ADDENDA

Addendum 1: Bone marrow transplant graphic changed from square printed version to vertical mobile graphic



Beenmurgskenking

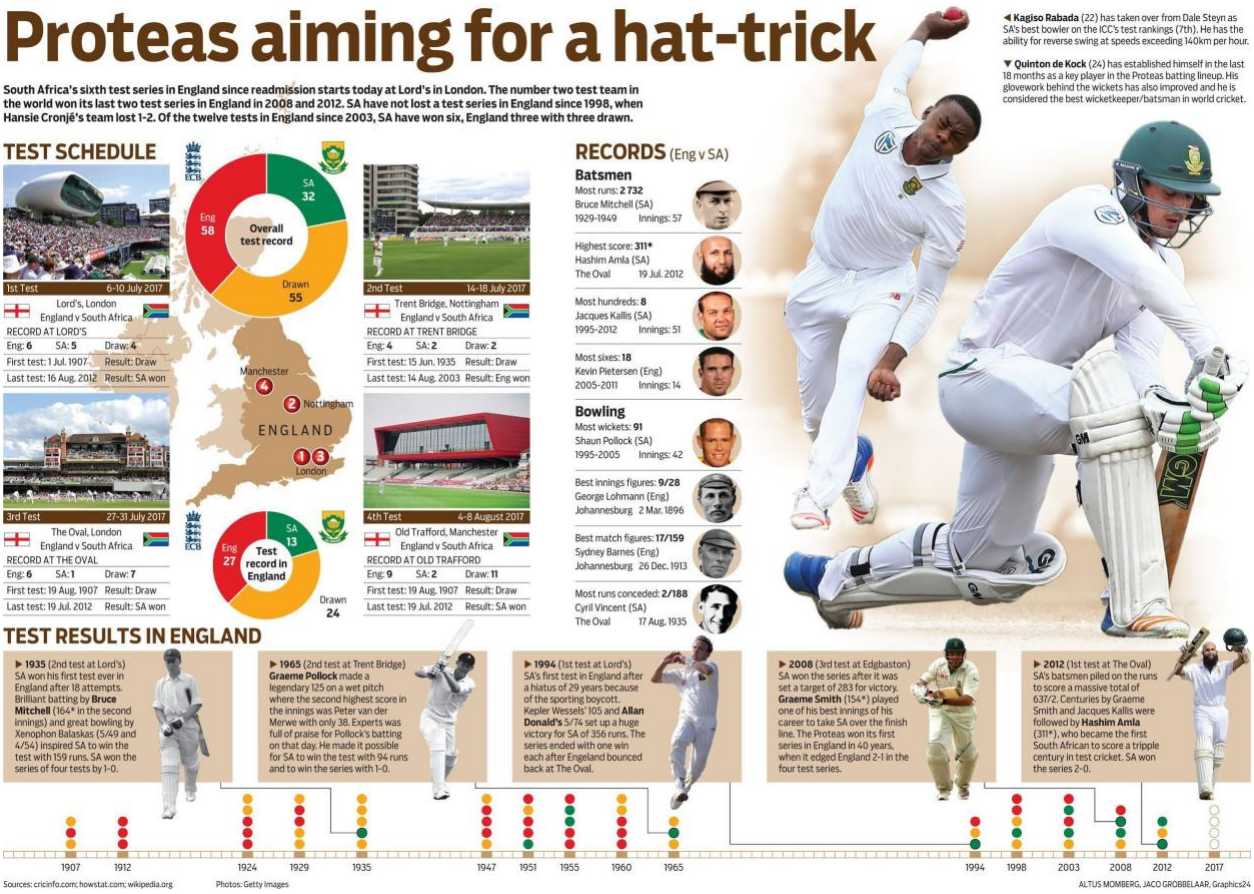
Help só – dit is pynloos en maklik.



Bron: sunflowerfund.org.za

MORNÉ SCHAAP, Grafika24

Addendum 2: Cricket graphic changed from rectangular printed version to vertical mobile graphic



TOETSPROGRAM

1ste toets 6-10 Julie 2017

Lord's, Londen
Engeland t. Suid-Afrika

REKORD OP LORD'S

Eng: **6** SA: **5** Onbeslis: **4**

Eerste toets: 1 Jul. 1907 Uitslag: Onbeslis

Laaste toets: 16 Aug. 2012 Uitslag: SA wen

2de toets 14-18 Julie 2017

Trent Bridge, Nottingham
Engeland t. Suid-Afrika

REKORD OP TRENT BRIDGE

Eng: **4** SA: **2** Onbeslis: **2**

Eerste toets: 15 Jun. 1935 Uitslag: Onbeslis

Laaste toets: 14 Aug. 2003 Uitslag: Eng wen

3de toets 27-31 Julie 2017

Die Oval, Londen
Engeland t. Suid-Afrika

REKORD OP DIE OVAL

Eng: **6** SA: **1** Onbeslis: **7**

Eerste toets: 19 Aug. 1907 Uitslag: Onbeslis

Laaste toets: 19 Jul. 2012 Uitslag: SA wen

4de toets 4-8 Augustus 2017

Old Trafford, Manchester
Engeland t. Suid-Afrika

REKORD OP OLD TRAFFORD

Eng: **9** SA: **2** Onbeslis: **11**

Eerste toets: 19 Aug. 1907 Uitslag: Onbeslis

Laaste toets: 19 Jul. 2012 Uitslag: SA wen

REKORDS (Eng t. SA)

Kolwers

Meeste lopies: **2 732**
Bruce Mitchell (SA)
1929-1949 – Kolfbeurte: 57

Hoogste telling: **311 n.u.n.**
Hashim Amla (SA)
Die Oval – Julie 2012

Meeste honderdtalle: **8**
Jacques Kallis (SA)
1995-2012 – Kolfbeurte: 51

Meeste sesse: **18**
Kevin Pietersen (Eng)
2005-2011 – Kolfbeurte: 14

Boulers

Meeste paaltjies: **91**
Shaun Pollock (SA)
1995-2005 – Boulbeurte: 42

Beste ontleding in 'n beurt:
9/28 George Lohmann (Eng)
Johannesburg – Mrt. 1896

Beste wedstrydontleding:
17/159 Sydney Barnes (Eng)
Johannesburg – Des. 1913

Meeste lopies afgestaan:
2/188 Cyril Vincent (SA)
Die Oval – Aug. 1935

Addendum 3: Graphic published online showing pixelation