CHAPTER 2

CARs in context

2.1 Introduction

Information is creative energy (Wheatley, 1999:93) that is screened by "accounting of the mind" practices and then captured by accounting practices, which are the generators of accounting information (Staubus, 1995:95). This information is *inter alia* used by a mandatory financial information system (MFIS) to generate the statutory disclosures governed by GAAP. A discretionary information system (DIS) uses discretionary accounting practices to select from the information that has been screened by accounting practices to generate relevant discretionary disclosures. The accounting information not used by the MFIS can be used by the DIS to disclose relevant discretionary disclosures, such as value-added statements.

The objective of this chapter is to explore CARs in context. According to systems theory the properties of the parts can be understood only from the organisation of the whole (Capra, 1996:29). It is therefore important to understand the context in which CARs are drawn up, in order to obtain a better understanding of them as a product of various processes.

As a frame of reference for this study, table 2.1 that follows sets out the features that form the context for CARs, with an indication of the chapters in which they will be dealt with.

Table 2.1 Conceptual context of CARs

Features	Description	Chapter
Historical perspective	Important aspects of the history and development of CARs in order to link the past with the present.	Chapter 2
The systems	Interpretation of the systems that generate the information disclosed in CARs.	Chapter 2
Information in CARs	Investigation into the attributes of information from two different paradigms.	Chapter 2
The processes that influence reporting in CARs	The processes that influence reporting in CARs are explored using a network of interconnections.	Chapter 3
Statutory information in CARs	The statutory disclosures in CARs governed by GAAP, which represent the output of the MFIS, are investigated.	Chapter 4
Discretionary information in CARs	The discretionary disclosures in CARs produced by discretionary accounting practices, which represent the output of the DIS, are investigated.	Chapter 4
Communication in CARs	The communication potential of CARs is explored to discover ways of bridging the gap between the preparers and users of CARs.	Chapter 5
Decision usefulness	The features of decision usefulness are explored.	Chapter 6
Decision making	The interpretability and usability of CARs in decision making are explored.	Chapter 6

This chapter explores the features that form the context for CARs. Firstly, important aspects of the history and development of CARs will be presented to link the past with the present and to produce insights for shaping the CARs development process. This will be followed by an interpretation of the two systems that drive CARs. The perception is that CARs, which are driven by several reporting processes, are the information products of interrelated reporting systems, for example the statutory disclosures system and the discretionary disclosures system. In addition, an investigation into the attributes of the information disclosed in CARs will be undertaken according to two different paradigms.

2.2 CARs: a historical perspective

2.2.1 Introduction

The purpose of exploring the process and development of CARs is to develop an understanding of the important events that link the past with present-day corporate business reporting. Business reporting (AICPA, 1994:2), that is, the statutory disclosures and the discretionary disclosures contained in CARs, may be defined as the information an entity provides to help the users of that information with capital-allocation decisions relating to that entity. This reporting includes a number of elements; financial statements being one of them. This type of reporting involves communicating business information that decision makers will find relevant (Beaver, 1981:xiii). The users therefore play an important role in the development of CARs.

Business reporting has evolved over the centuries and has been typified by slow, random, reactive and unempirical growth (Garbutt, 1981; Edwards, 1989; Mattesich 2000; Zeff, 2005:1; Vorster, 2007:32). This issue will also be tested in the questionnaire to be distributed to the preparers of CARs in chapter 9 (statement 1: *Business reporting evolved over centuries and was typified by slow, random and reactive growth*). Initially records of business transactions were few and ungoverned, with the business reporting system being highly unregulated and based on tradition and convention (Gouws & Rehwinkel, 2004:81). Later, useful accounting and stakeholder practices became generally accepted

accounting principles, but resulted in the under-utilisation of CARs' creative and innovative potential. Gouws and Rehwinkel (2004:81) express the view that this "rule book" approach repeatedly vindicated ineffective practices. The developmental focus entailed a top-down approach, with the introduction of accounting principles and standards by accounting regulators, and not a bottom-up approach, such as a consideration of the needs of stakeholders.

Furthermore, government and corporate interventions inhibited the independence and scientific nature of the profession (Zeff, 2005:2). The focal point of business reporting was too narrow and external regulations too overwhelming, resulting in increased and recurrent accountancy problems (Gouws & Rehwinkel, 2004:81). Fortunately, business reporting is in an expansionary phase (this issue will be tested as a statement to be included in the questionnaire to be distributed to preparers of CARs; statement 2: *Business reporting is in an expansionary phase*) and the type of reporting currently found in CARs consists of statutory disclosures governed by GAAP, and discretionary disclosures (Beattie & Jones, 2001:196; West, 2005:7) that concentrate *inter alia* on the needs of employees, customers and suppliers and the capital market.

2.2.2 A historical perspective

The history referred to in this chapter is a literature review of empirical research by other researchers.

All developing and developed societies make never-ending demands on business reporting as a result of their ever-increasing needs. The basic ingredient of business reporting is the recording of data in order to report on it. Even now there are still similarities between the business reporting function in the ancient world and the world of today. No entity has ever been able to afford an unreliable record of receipts and payments or assets and liabilities. Increases in wealth and prosperity demanded a type of

agency reporting, whereby agents who acted on behalf of their masters, using delegated powers to run their affairs, had to report on the running of their masters' affairs and the protection of their interests, for example the assets. According to the wording of the gospel of Luke (16:2), "[t]urn in the account of your management [of my affairs]…" it would seem that reporting to stakeholders on the state of business affairs was common in Biblical times. Today the directors of an entity would be in an agency relationship with the owners and the other stakeholders. The directors act on behalf of the owners and, for this service, earn directors' fees.

In ancient civilisations, the collection of public funds in the form of taxes gave rise to a system of accounting and reporting. These times were not without their problems, as the majority of people were still illiterate and transactions were recorded on materials such as stone tablets, which were scarce, expensive, heavy and difficult to handle. The recording process was difficult and took a long time and, in most cases, money as a means for measuring worth did not exist. In spite of all the inconvenience, this information was perceived to be so important that it was preserved on tablets of stone.

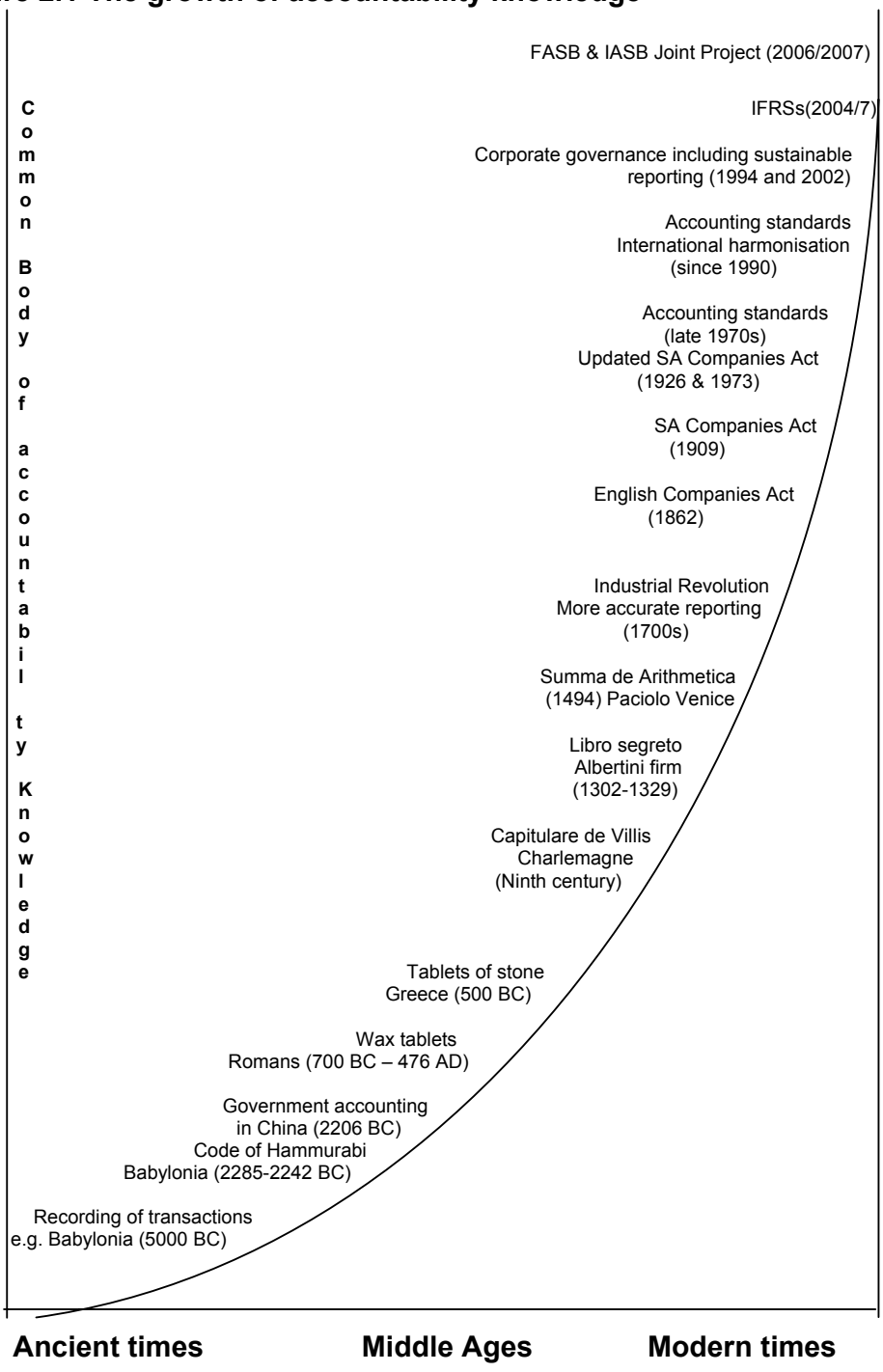
Some of the earliest writings that have been discovered are commercial and trade records. Most (1977:23) states: "There are respectable hypotheses that both writing and arithmetic originated in the need to keep accounts, and that this first took place at the time of man's transition from hunter to cultivator." Therefore, by implication, the need to communicate economic and business-reporting issues was the driving force in the development of written language and arithmetic.

To ensure maximum publicity, information and accounts (the first signs of CARs) were engraved on stone and placed in strategic places where the public had access to them. These disclosures of information were the product of the recording processes then in force. Today CARs are the information products of the systems that generate the disclosures in CARs.

2.2.3 The growth of CARs

The following figure (figure 2.1) illustrates various reporting events over the centuries that contributed to the development of modern CARs.

Figure 2.1 The growth of accountability knowledge



Source: Herbert (1971 in Most 1977:5) (adapted)

These reporting events were the products of information-processing systems, and over time the disclosures escalated as they were influenced by more and more processes, including users' needs, standard setting and so on.

The roots of CARs go far back in history (Gouws, 1982:29) and it seems as if certain functions of business reporting have been applied since the origin of handwriting. This is understandable as there is a relationship and correspondence between the business reporting functions and history. Financial and business reporting and history are both concerned with gathering, recording, systemising and ordering facts, events and actions (transactions).

2.2.3.1 Ancient times

Archaeological excavations have confirmed that financial and business reporting was a feature of ancient civilisations. Brown (1968:16-17) reports that ancient civilisations, for example the Babylonians (approximately 5000 BC), were involved in trading activities and had to provide a detailed agency account or report to their masters. This may be seen as the basis of accounting as we know it today, as reporting to stakeholders remains one of the most important objectives of accounting. The actual recording of transactions dates back to 4000 BC and these detailed agency reports were thus the information product of the systems responsible for their generation. There is proof that formal codes of practice or requirements that served as a motive or incentive for the recording function were already in existence. The best-known code is the Code of Hammurabi, who was king of Babylonia from 2285–2242 BC (Brown, 1968:17; Chatfield, 1977:5). Gouws (1982:35-36) contends that this code may be seen as one of the first attempts to standardise the corporate business reporting process, which is a development that is still ongoing today. Hammurabi's Code may be compared with our current International Accounting Standards (IASs) and International Financial Reporting Standards (IFRSs).

In ancient China, reporting was mainly used to evaluate the success of the government and its personnel. Every government department had to compile annual reports (note the similarity to the current CARs) to report on what had been achieved, and these statements were audited by the "control-general". No accounting records survived the fall of the Roman civilisation (700 BC–476 AD), as they kept their accounts on wax tablets, which

were perishable (Most, 1977:24). Today CARs are printed on paper and/or kept in electronic format. In Greece, a stone tablet has been found bearing an account of disbursements of the Athenian state (418 BC to 415 BC). Today this tablet is to be found in the British Museum (Brown, 1968:27). In those days the recording process was difficult and took a long time, however despite all the effort involved, the disclosure of this type of information was seen to be important. The stone tablets were therefore the product of an accounting information system relevant at the time.

2.2.3.2 The Middle Ages

Charlemagne's "Capitulare de Villis", which developed during the ninth century, displays images of a series of detailed instructions to the steward for giving account of his stewardship. The fledgling characteristics of an accounting system were therefore already observable (Gouws, 1982:45). The detailed instructions for the steward were the beginnings of accounting standards and the international financial reporting standards (IFRSs) currently used by the MFIS for reporting statutory matters in CARs.

Visser (1978:10) states that, in the 1300s, partnerships used a secret or private ledger called the *libro segreto,* which was kept by one of the partners. This *libro segreto* is one example of early business reporting and such a ledger used by the Albertini firm covers the period 1302–1329. In the year 1494, Luca Paciolo (Latinised as Lucas Patiolus [Brown, 1968:108; Previts & Merino, 1998:4-5]) published his book *Summa de Arithmetica, Geometria Proportioni et Propotionalita* in Venice in which he explained the principles of the double-entry system, which had been in use in Venice for more than two hundred years. He was not the developer of the double-entry bookkeeping system, but documented the practices of his time. These practices (Gouws, 1982:45) may be compared to current day GAAP, which is used by the MFIS in producing statutory disclosures in CARs.

2.2.3.3 Modern times

The Industrial Revolution gave rise to an escalation in disclosures. From the long history of CARs it may be seen *inter alia* that financial and business reporting was a process that constantly responded to the needs of the environment and of the society in which it was functioning. Apart from the influence that society had on CARs, they in turn have had a major influence on various elements of society. Today CARs represent an interaction between entities and stakeholders with the purpose of generating and sharing information. This statement will be tested further in the questionnaire to be distributed to preparers of CARs in chapter 9 (statement 7: *CARs can be visualised as the product of information systems, representing an interaction between the entity and stakeholders to generate and share information*).

The first reporting requirements for companies in England were governed by the requirements of the English Companies Act, which was adopted in 1862. The South African Companies Act of 1909 was based on the English Companies Act and was later amended in 1926 and again in 1973. Visser (1978:393) reports that over time these amendments became necessary in order to cater for developments in financial reporting. The requirements of the South African Companies Act are *inter alia* applied by the MFIS in generating the statutory disclosures in CARs.

Accounting standards appeared on the scene in the late 1970s and, in conjunction with the requirements of the Companies Act, represented the generally accepted accounting principles that govern the mandatory section of information in CARs. According to Visser (1978:394), "… a very conservative effort was made to conserve a balance between the need to inform investors and a fear of disclosing too much information which might in turn be a disadvantage to the said company in its competition with other companies as these might take a mean advantage of such information".

Companies progressively disclosed more information in CARs than was required by law (Foster, 1986:31) in order to obtain the support and understanding of their investors and potential investors on the one hand, and management, employees, the public, creditors and other stakeholders on the other. A further development in the disclosure requirements of the statutory information reported in CARs was the international harmonisation initiative that commenced in 1995. This led to the release of international accounting standards (IASs) aimed at making the statutory disclosures in CARs more comparable around the globe. The South African GAAP statements are in all respects the the same as the IASs and IFRSs. The accounting standards that are complied with in South Africa are therefore the accounting standards that are complied with in the United Kingdom. Currently, IFRSs are gradually replacing IASs, and a joint project of the International Accounting Standards Board (IASB) and the Financial Accounting Standards Board (FASB) is underway with the aim of developing a common conceptual framework that is both complete and internally consistent. Such a framework would provide a sound foundation for developing future accounting standards and is essential to fulfilling the Boards' goal of developing standards that are principles-based, internally consistent, and internationally converged, and that can lead to financial reporting that provides the information needed for decision making (FASB, 2007:1). An example of the transition of accounting practices in the public sector is the accounting for heritage assets under the accrual basis of accounting driven by the International Public Sector Accounting Standards Board. Heritage assets are assets with historic, artistic, scientific, technological, geophysical or environmental qualities that are held and maintained principally for their contribution to knowledge and culture, and this purpose is central to the objectives of the entity holding them. In addition to museum collections, such as those of art, antiquities and books, the term "heritage assets" includes assets such as landscape and coastline, historic buildings and archaeological sites (IFAC, 2006:10).

The growth in accountability knowledge since 5000 BC has been remarkable. It has evolved from the basic reporting of those times to the point where CARs now display the attributes of multifarious reporting and, as Lee (1994:223) points out, annual reports are multipurpose documents. The next section is an interpretation of the systems that generate the information disclosed in CARs.

2.3 The systems responsible for disclosures in CARs

CARs consist of two sections, that is, a section of statutory disclosures and a section of discretionary disclosures (Stanton & Stanton, 2002:479). This statement will be tested in the questionnaire to be distributed to preparers of CARs (see chapter 9) as statement 6 (*CARs are normally divided into two sections, that is, the statutorily required financial information and the discretionary* disclosures) and statement 9 (*CARs that are driven by user needs represent* inter alia *a system responsible for generating statutory disclosures governed by generally accepted accounting practices [GAAP] and a system responsible for generating discretionary disclosures*). In chapter 1 it was stated that a lack of understanding of the interdependency of the interrelated systems that generate disclosures in CARs, for example a system responsible for generating statutory disclosures and a system responsible for generating discretionary disclosures, which *inter alia* also form the context of CARs, results in the under-utilisation of CARs' creative and innovative potential. The discretionary disclosures could for example be researched to further develop statutory disclosures. The discretionary disclosures complement statutory disclosures for a full understanding of the business as a whole. Discretionary disclosures therefore fill the gap left by statutory disclosures.

The DIS is a system involved in the discretionary disclosures in CARs. The discretionary disclosures *inter alia* form the context within which to understand the mandatory financial information disclosed in CARs which is generated by an MFIS. The discretionary disclosures are more flexible and relevant, but not necessarily uniform. Companies use discretionary disclosures when accounting standards and the associated financial accounts appear to be inherently unsuitable for disclosing matters such as intellectual capital (OECD, 2006:5). The DIS has the attributes of an open system as it responds to the information needs of users. The MFIS is the system involved with the mandatory information disclosed in CARs and is governed by GAAP, JSE regulations and the Companies Act. The purpose of the MFIS is to limit alternative statutory disclosures in order to promote uniformity.

The discretionary information disclosed in CARs is an important source for standard-setting bodies to explore to develop accounting standards further. Information generated by the DIS, in the form of discretionary disclosures in CARs could, after rule-making bodies have carried out a certain amount of research, become mandatory information in CARs, which would then be generated by the MFIS.

Capra (2002:202) maintains that sustainable systems evolve their patterns of existence over time in continual interaction with other systems. This principle of continual interaction manifests itself in the systems that drive reporting in CARs. The sustainability of these systems involves change and a dynamic process of co-evolution rather than a static state (ibid, 2002). The information in CARs changes constantly and is never static. Systems are self-generating networks, organisationally closed within boundaries but open to continual flows of feedback. There are six principles of ecology that are critical to sustaining systems (ibid, 2002): networks, cycles, uncertainty, partnership, diversity and dynamic balance. These principles are discussed further in table 2.2.

Table 2.2 Principles of ecology applied to CARs

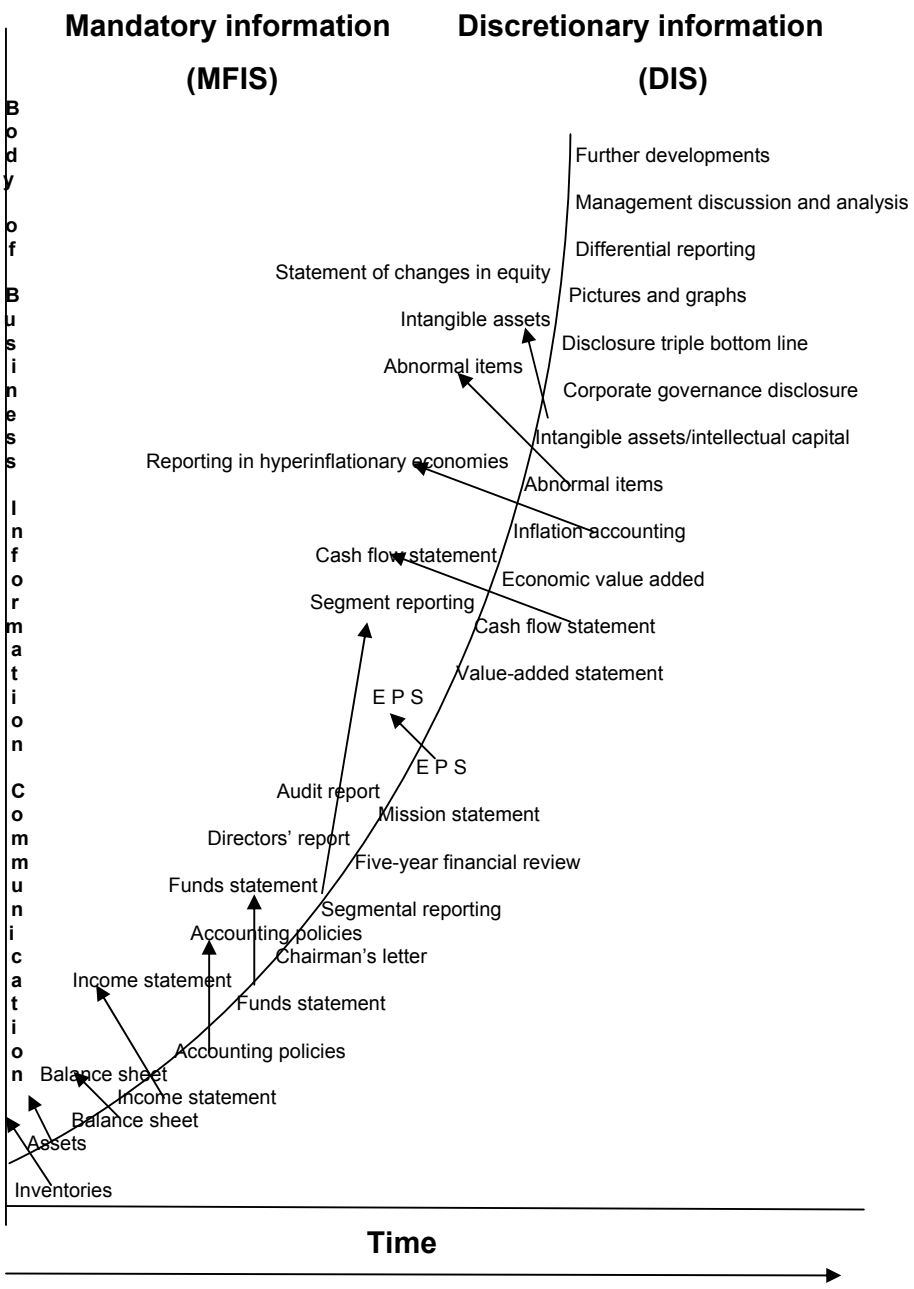
Networks Systems can be viewed as networks within networks. Their boundaries are not boundaries of separation but boundaries of identity (Capra, 2002:202). CARs are perceived as the products of interrelated systems, the MFIS and the DIS, and are driven by the information needs of stakeholders. As in the case of networks, the boundaries of these systems sometimes overlap.
Cycles All systems act on feedback from their environment (Capra, 2002:202). As with systems, there is interaction between the entity and the stakeholders in order to generate and share information, which is constantly on the increase and is presented in different formats in CARs. CARs represent webs of relationships.

Uncertainty and information For its own survival systems need energy to continuously change from areas of discomfort (uncertainty) to areas of equilibrium (Capra, 2002:202). The needs of different stakeholders for decision-useful information to reduce uncertainty likewise influence the change in disclosures in CARs.
Partnership The exchanges of energy and resources in a system are sustained by co-operation (Capra, 2002:202). This cooperation may also be seen in CARs as the business information created by accounting practices that has the potential to become discretionary or statutory information in CARs. The discretionary information reported in CARs, if proven useful over time, has the potential of being accepted as statutory information governed by generally accepted accounting principles.
Diversity The greater the diversity of systems, the more resilient they will be (Capra, 2002:202). This diversity manifests itself in the systems, for example, in the discretionary disclosure system that generates discretionary disclosures and the mandatory disclosure system that generates statutory disclosures. The information generated by the systems is diverse in nature, as the mandatory information is governed by GAAP and is therefore more reliable than the discretionary information, which is more flexible and relevant.
Dynamic balance A system is a flexible, ever-fluctuating network. (Capra, 2002:202). As far as CARs are concerned the two systems, the MFIS and the DIS produce disclosures that evolve owing to accounting practices in transition.

The basic principles of ecology – the nonlinear network structure, multiple partnerships, diversity of systems and the goal of optimising instead of maximising information – are fundamental requirements for the proper functioning of the systems responsible for generating disclosures in CARs.

Figure 2.2 is a representation of the growth in the body of business information disclosures over the centuries. The specific dates of the occurrences have been omitted, as the exact dates of their appearance are not known. The graph reflects growth over time and the representation assumes that the first link in the business information disclosure chain was the recording of inventory generated by the discretionary disclosures that later formed part of statutory disclosures. The arrows on the graph indicate which discretionary information became mandatory information over the centuries. For example, earnings per share (EPS) was discretionary information at first and, after being found useful, became mandatory information, IAS 33 (IASB, 2005). Information in respect of intangible assets was first disclosed as part of discretionary information and later an accounting standard for intangible assets was developed, IAS 38 (IASB, 2005). Note that not necessarily all of the discretionary disclosures become mandatory disclosures, for example internally generated goodwill is not regarded as an intangible asset in IAS 38 (IASB, 2005).

Figure 2.2 The growth and conversion of business information disclosures



Source: Own observation

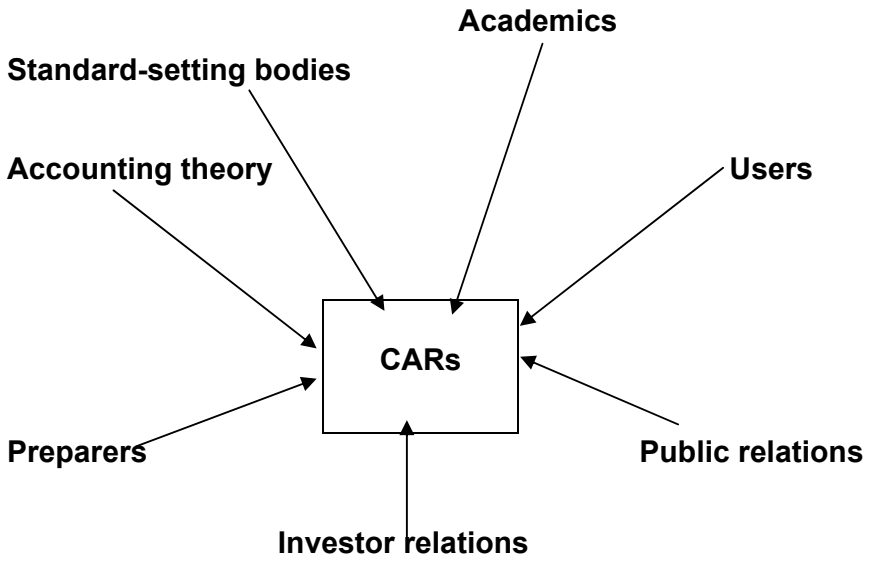
Figure 2.2 indicates that discretionary accounting practices utilised by the DIS, by means of which discretionary information in CARs is presented, has the potential, if found to be useful over time, to become generally accepted accounting principles uitilised by the MFIS for disclosing statutory information in CARs. A statement that has not yet developed

to the point of being governed by GAAP is the value-added statement (Van Staden, 1998). Figure 2.2 shows that almost all statutory disclosures originated as discretionary disclosures. Furthermore, current and emerging business practices will influence the evolution of accounting practices in the future. This is because accounting practices and discretionary accounting practices develop over time and, if they become known and prove useful, they eventually become generally accepted accounting practices. In the questionnaire to be distributed to preparers of CARs (chapter 9), this issue will be tested as statement 3: *current and emerging business practices will influence the evolution of accounting practices in the future*.

2.4 Disclosure of information

CARs are driven by various reporting (disclosing of information) practices in order to provide adequate information. Without adequate information users of business reporting cannot accurately judge the opportunities and risks inherent in investment opportunities (Knutson, 1993:12; AICPA, 1994:1). CARs must therefore perform the role of carriers of adequate information – the creative energy for decision making.

Figure 2.3 The role players of CARs



Source: Own observation

Figure 2.3 gives an indication of the various role players that influence the information contained in CARs. The standard-setting bodies are the major role player in the development of accounting practices to create disclosures in CARs. They carry out their own research and develop and refine the IFRSs and IASs that generate the mandatory disclosures in CARs. Academics are also involved in research projects and write articles to communicate their research findings to interested parties. Professionals identify, facilitate and disclose information; management is responsible for the information that is disclosed and "… has considerable discretion over the content and timing of the many diverse public disclosures it makes …" (Foster, 1986:24); users are entitled to use the information for addressing uncertainties and risk; public relations (including corporate communications) has the task of communicating entity information to stakeholders; and investor relations has the task of identifying the types of disclosure that are important to investors. OECD (2006:11) identifies a diversity of actors that influence the ultimate disclosures in CARs (e.g. different types of investor, accounting bodies, academics, science policy specialists, management consultants).

Another role player that shapes the information content in CARs is accounting theory. Hendriksen (1977:1) defines accounting theory as "a set of broad principles that (i) provides a general frame of reference by which accounting practice can be evaluated and (ii) guides the development of new practices and procedures". The role of accounting theory is to provide frameworks for the orderly dissemination of disclosures in CARs.

The roles that preparers and users play in the outcome of CARs will be explored in chapters 9 and 10. The statements to be incuded in the questionnaire for preparers (chapter 9) will be as follows: statement 15a: *Although the ultimate responsibility for the preparation of CARs lies with the directors (represented by the Chief Executive) of publicly listed companies, the following department(s) is/are entrusted with the preparation of the following sections of CARs: The* ***financial department*** *is entrusted with the accumulation and preparation of the mandatory information section (e.g. the statutorily required financial*

statements and notes) of CARs); statement 15b: *The **finance department** is entrusted with the accumulation and preparation of the discretionary (voluntary) information section (e.g. including integrated sustainability reporting, corporate governance matters and other discretionary [voluntary] reporting.) of CARs*; statement 15c: *The **investor relations department** has the opportunity to advise on the types of information that should be disclosed in CARs*; statement 15d: *The **finance department** is entrusted with the final preparation of CARs using the mandatory information as in a) and the discretionary information as in b) and the information as in c)*; statement 15e: *The **corporate communications department** is entrusted with the final preparation of CARs using the mandatory information as in a) and the discretionary information as in b) and the information as in c)* and statement 16: *The CARs preparation process involves a team effort, where several departments work together*.

Larger companies make use of external designers in the CARs preparation process (Stanton & Stanton, 2002:479). In order to identify the role players who instruct designers on the design of CARs, the following statements will be included in the questionnaires for designers (chapter 11) as follows: statement 1a: *The company representative/s that instruct/s and consult/s you regarding the design of CARs is/are normally from the following department(s): Corporate communications*; statement 1b: *The company representative/s that instruct/s and consult/s you regarding the design of CARs is/are normally from the following department(s): Finance* and statement 1c: *The company representative/s that instruct/s and consult/s you regarding the design of CARs is/are normally from the following department(s): Other*.

The CARs of entities exist as a result of the need for information. In the information age the role of CARs as the carriers of messages for the benefit of various role players has become very important. The information these contain must be available in an understandable form that meets the needs of the various role players. Disclosures in CARs may be based on the attributes of the new science and/or the attributes of the old science. The new science of the twenty-first century is a perspective of nonlinear thinking,

where relationships, connections and context play a major role and where events and transactions are mainly unpredictable (Capra, 1996:122). This does not prohibit or limit users from engaging in forecasting activities. The disclosures in CARs can only be understood within the context of the larger whole, that is, taking all the features of the conceptual context of CARs into account (refer to table 2.1). The context of CARs must first be understood before it can be decided what types of information to disclose. On the other hand, the old science is involved with the perspective of linear thinking, classification and boundaries, which developed in the seventeenth century. It represents the belief that in every complex system the behaviour of the whole can be understood entirely from the properties of its parts (Wheatley, 1999:29). In terms of this model, CARs can therefore only be understood by studying the disclosures in CARs separately.

Most of the disclosures in CARs today are based on the “old science” model. However, the following section will reveal that the disclosure of information in CARs is primarily driven by two systems, which are based on two different models. The system that generates and discloses voluntary information is based on and makes more use of the attributes of the new science model, while the system responsible for generating and disclosing mandatory information tends to be based on and use the attributes of the old science model. As such, the disclosure of balanced information (according to these two models) in CARs is not an easy task. In order to discover how the attributes of information (according to the two models) differ, a comparison will be made between information presented in accordance with the old science model and that presented from a new science perspective.

In table 2.3 the attributes of the old and new science (Blignaut, 2002:273-274) have been applied to the systems generating disclosures in CARs.

Table 2.3 The old science versus the new science

Attribute	The old science	The new science	Application to the two systems driving the disclosures in CARs
Science	Absolute, deterministic influence of science and technology	Science: chaos and qualitative	The information disclosed by the MFIS is absolute because it is governed by GAAP. **(Old science)**. The information disclosed by the DIS tends to be more qualitative, because rules play a lesser role when deciding what to disclose and what not. **(New science)**.
Truth	Truth as objective and neutral	Truth, objectivity and neutrality subject to the role of belief and value systems	The MFIS discloses information that is more reliable and neutral. A clinical approach is followed. **(Old science)**. The issue of reliability will be tested in the questionnaire for users (chapter 10) as follows: statement 2: *I mainly use the statutory information [e.g. the financial statements] presented in CARs because it is more reliable and standardised*. The DIS discloses information that is more subjective, where use is also made of visuals and photos. An entity could for example boost its corporate image with this subjective information. **(New science)**.
Cosmos	Closed systems	Open systems	The MFIS responsible for generating statutory disclosures in CARs may be viewed as a semi-open system. The development of generally accepted accounting principles is influenced mainly by external incidents, which it uses for disclosures in CARs. The GAAP used by the MFIS are initially published as exposure drafts and circulated for comment before they are approved as accounting standards. **(Old and new science)**. The DIS is an open system, as it reacts with the feedback received from different stakeholders. Disclosures by the DIS over the years have escalated, which shows that this system reacts to the feedback it gets. However there might be room for improvement. **(New science)**.
Cosmos	Predictability/measurability/control	Complexity	The information disclosed by the MFIS, as a result of the rules laid down by accounting standards, is more controlled and measurable than that disclosed by the DIS. **(Old science)**. On the other hand, the information disclosed by the DIS is more difficult to measure. It might for instance not be measurable e.g. intellectual capital. **(New science)**.
Source of strength	Stability	Change	The information disclosed by the MFIS is more stable and average **(old science)**, while the information disclosed by the DIS is more volatile and fluctuates from moment to moment. **(New science).**

Style	Structured	Flexible	As GAAP is used to govern the disclosures by the MFIS, it is more structured. **(Old science)**. On the other hand, the disclosures by the DIS are more flexible as there are not always specific rules for how and where in CARs they should be disclosed. **(New science)**. The issue of flexibility will be tested in the questionnaire to users (chapter 10) as follows: (Statement 3: *I mainly use the discretionary information presented in CARs because it is more flexible and relevant*).
Strategy	Top down	Bottom up	GAAP follows a top-down approach as it prescribes the information to be disclosed by the MFIS in CARs. **(Old science)**. In most cases the DIS follows a bottom-up approach, as the feedback from stakeholders can be taken into account more easily. Apart from the guidelines of the global reporting initiative (GRI), and guidelines for disclosure of an operating and financial review (OFR) for example, there are fewer rules. **(New science)**.
Improvements	Incremental	Revolutionary	As from 2003/4 there have been vast improvements in the accounting standards used by the MFIS in the generation of disclosures. However, over the years these improvements have been incremental, owing to the time it takes to get them internationally accepted and implemented. **(Old science)**. The discretionary information section in CARs shows that there have been major improvements in discretionary disclosure, for example the introduction of photos and visuals. Disclosures are constantly on the increase. **(New science)**.

The attributes of the old science and the new science are very different. Table 2.4 shows how the information presented in CARs will differ if presented in accordance with the attributes of the old science paradigm (mainly used by the MFIS) compared with those of the new science paradigm (mainly used by the DIS). For this comparison (see table 2.4) use was made of the attributes of information contained in Wheatley (1999).

Table 2.4 A comparison of the information presented in CARs

In accordance with the attributes of

THE MFIS	**THE DIS**
The information is provided according to the rules of GAAP and accounting praxes.	The information is provided using a spontaneous approach.
The information appears in numerical form for example and is structured and classified.	The information is presented in such a way that it allows stakeholders to comprehend the whole.

The information is usually uniformly presented.	The visual appearance of the information is important and there is much scope in CARs for creative and artistic design.
The informational content is shaped by various regulations and standards.	The information content is relatively difficult to control owing to the abundance of information and lack of standards.
The underlying form in which the information is presented is important.	The contents and meaning of information are important. The underlying form is unimportant.
There is a tendency for average fluctuations to give smooth statistics. The emphasis tends to be on large numbers, important trends and major variances.	All information is important. Fluctuations give rise to information and convey important messages.
The information presented is rational and straightforward.	The information presented focuses more on quality than on quantity.
Most of the information presented is measured, quantified and audited.	All information is not necessarily measured, quantified and audited.
The information in CARs is presented objectively.	The information is presented subjectively.
The information is presented in an orderly way. In general one is therefore unlikely to find information that is disturbing, different or disconfirming.	The information presented deals with both good news and bad news and the information is essential for all stakeholders (public accountability).

Table 2.4 indicates how disclosures in CARs generated by the MFIS and the DIS differ as a result of the different attributes of the two systems. Although diiferent in nature, the disclosures generated by the two systems complement each other and give rise to full disclosure in CARs. This issue will be further explored in the questionnaire for users (chapter 10) as follows: statement 4: *As the statutory and discretionary information in CARs complement each other, I make use of both these sources of information*.

Both tables 2.3 and 2.4 show that the MFIS, which discloses the statutory information in CARs governed by GAAP, has the attributes of information presented in the old science paradigm, for example, various regulations and standards shape the informational content of the statutory information and a rule-book approach is followed. Tables 2.3 and 2.4 also show that the DIS, which discloses the discretionary information in CARs generated by discretionary accounting practices, has the attributes of information presented in accordance with the new science model, for example, the information reflects the overall picture to give a comprehensive view of a company (OECD, 2006) and far more emphasis

is placed on aesthetic features. Desmond (2000:168) mentions the idea of a core document that summarises information for all users in a compelling and accessible way.

The information that is too detailed for the core document may be divided into two categories: mandatory disclosures and voluntary communication. Whatever the form of CARs, the preparers and compilers of these documents need to strike a balance between the two models in order to present meaningful information in CARs as a whole.

2.5 Summary and conclusion

This chapter explored the features that form the context of CARs. Important aspects of the history and development of CARs were presented to link the past with the present and to produce insights for shaping the process of CARs development. It was concluded that the growth in accountability knowledge since 5000 BC has been of great significance. From the basic reporting that characterised its beginnings, it has evolved and grown, and today CARs contain the attributes of multiplicity.

An interpretation of the two systems that generate disclosures in CARs was undertaken. It was assumed that CARs, the development of which is driven by the needs of the users to reduce uncertainty and risks, represent a larger system (the DIS) in which statutory disclosures governed by GAAP form a subsystem (the MFIS) and that there is an interrelationship between this subsystem and the larger system. It was shown that almost all statutory disclosures generated by the MFIS originated as discretionary disclosures generated by the DIS. This is because accounting practices and discretionary accounting practices develop over time and, after they have become known and have proven useful, become generally accepted accounting practices. GAAP is the tool used by the MFIS to generate statutory information in CARs.

An investigation into the attributes of the information disclosed in CARs was also undertaken using two different paradigms. It was concluded that the preparers and compilers of CARs need to strike a balance between the two paradigms in order to present meaningful information in CARs as a whole.