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Exploring How the Balanced Scorecard Engages and Unfolds: Articulating the Visual Power of
Accounting Inscriptions*

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Abstract

Research on the Balanced Scorecard (BSC) has questioned whether its adoption generates greater integration between financial and non-financial performance measures, supports strategy implementation, increases performance and improves strategic decision making. This research has also highlighted how the BSC often generates effects *other* than these. Building on studies that portray Performance Measurement Systems (PMSs) as intrinsically incomplete practices of representation, the purpose of this paper is to investigate how the BSC engages users due to the organizing work that it stimulates around this incompleteness. Our findings allow us to further articulate the power of specific visual elements of the BSC, such as hierarchical trees, wheels, causal and strategy maps. The paper provides material that contributes to a better understanding of how the BSC performs multiple roles within organizations beyond a simple representational functionality and unfolds continuously. It contributes to the growing literature on accounting inscriptions, i.e. signs producing incomplete representations, by developing an analytical theoretical framework that defines the BSC as a rhetorical machine composed of four key features: (1) a visual performable space (i.e. a schema generating creative engagement); (2) a method of ordering and innovation; (3) a means of interrogation and mediation; and (4) a motivating ritual.

Key words: Balanced Scorecard; rhetorical machine; strategy, inscriptions.

JEL classification: M14; M40; M41.

Introduction

The Balanced Scorecard (BSC) has been defined as one of the major innovations in the recent history of management accounting (Atkinson, Balakrishnan, Booth *et al.* 1997; Ittner and Larker 2001), and it is said to respond to a call for integrating financial and non-financial performance measures in order to support strategy implementation, increase performance, and improve strategic decision making (Kaplan and Norton, 1992; 1996).

Although the BSC may not deliver what it promises (see Ittner 2008; Davis and Albright 2004), it often generates effects *other* than those that its designers wanted it to produce. Lipe and Salterio (2000; 2002), for example, have illustrated how the organization of Key Performance Indicators (KPIs) along the four BSC perspectives (Internal Business Processes, Learning & Growth, Customer Satisfaction, and Financial), affects managers' cognitive abilities when using large numbers of KPIs in assessing performance. Wiersma (2009) has shown how the BSC favors coordination and self-monitoring. Hansen and Mouritsen (2005) have illustrated how the BSC also plays a creative role in the emergence of new strategic imperatives, which may be in contrast to the reasons that originally prompted its adoption. Thus, the BSC seems to have functions that reach beyond those that it is said to have for engaging users, and it appears to unfold continuously due to the constantly changing rationales for its use (Malmi 2001; Qu and Cooper 2011; Speckbacher, Bischof, and Pfeiffer 2003).

However, how the continuous unfolding of rationales for the use of the BSC intertwines with its ability to engage users in practice is not yet clear. Building on research that portrays Performance Measurement Systems (PMSs) as intrinsically incomplete practices of representation and measurement (Dambrin and Robson 2011; Jørgensen and Messner 2010; Wouters and Wilderom 2008), we investigate how this incompleteness engages users because of the organizing work that the BSC stimulates around it, rather than because of the representational ability of the measures that the BSC provides. Drawing on a longitudinal case study of the implementation of the BSC in a large oil and gas corporation in the Middle East, the paper explores how the power of specific visual diagrams such as hierarchical trees, wheels, and strategy maps generates this

organizing work, and causes the BSC to carry out multiple functions within the organization, unfolding continuously.

The paper combines case study material with insights from the literature on accounting “inscriptions”, i.e. signs that produce incomplete representations (see Robson 1992; Preston, Cooper and Coombs 1992; Chua 1995; Dambrin and Robson 2011; Qu and Cooper 2011; and Wouters and Wilderom 2008, respectively), and research focusing on visual rhetoric (Bolzoni 1995; Carruthers 1990; 1998). It builds a theoretical framework that articulates the power of visual diagrams such as the BSC into four analytical features which explain, ultimately, how the visual designs utilised by the BSC create a space in which order and knowledge can be classified, different interests can be accommodated through a constant process of interrogation and re-invention of strategic visions and imperatives, and engagement can be sustained through participation in a series of recurrent activities.

This framework allows us to conceive of an accounting inscription as a force and process (see Fabbri 1998) and to show how the BSC always plays multiple roles when observed in practice, without having to rely exclusively on human agency (i.e., users’ intervention in making the BSC different) or external and contingent factors (e.g., the effect of firm size on changes in the BSC) in explaining this multiple functionality.

This augments our understanding of how the BSC and PMSs, as visual artefacts, engage users because of the enabling effects (Lipe and Salterio 2002; Qu and Cooper 2011; Wouters and Wildrom 2008) that these visualizations generate. Furthermore, the framework we propose analytically disentangles a key feature of accounting inscriptions, that is, their ability to prompt a process of referencing to a managerial practice, the BSC in the case of this paper, that keeps this practice apparently constant, while in fact undergoing a series of transformations due to the organizational and sense-making work this inscription prompts (a key aspect of the notion of accounting inscriptions, Latour 1999; see Dambrin and Robson 2011, p. 430). As we argue in the remainder of the paper, our framework enables us to understand how different and often opposing user interests can be accommodated within a stable visualization, such as the BSC’s shape of a wheel surrounded by four cards, whose content and rationale for use are continuously unfolding.

The paper is organized as follows. The following section reviews the literature on PMSs and the BSC in relation to its multiple functionality and enabling effects. The paper continues by introducing the literature regarding visual rhetoric and the notion of rhetorical machine,¹ which provided the inspiration for this article and framed the analysis of the empirical case. This is followed by the section on methodology in which we explain how we link the empirical and theoretical material. Then the case material is discussed. This structure allows us to rely on the literature and on the case study in order to gradually identify the four general features of the framework that defines the BSC as a rhetorical machine. Finally, the conclusions summarize the findings and delineate an agenda for further research.

2. Literature review

Langfield-Smith (2005) observed that the BSC emerged in the early 1990s as a framework for combining financial and non-financial performance measures and build explicit links between strategy, goals, performance measures, and BSC outcomes. While these relationships have been measured with difficulty (Langfield-Smith 2005), and regardless of the effective benefits that the BSC may produce, the BSC has had the merit to make management control regain relevance for strategy making (Chapman 2005). Thanks to this renewed interest in the BSC, strategy is no longer a ‘black box’ that accounting measures have to implement through faithful representation and functional measurements (Chua 2007; Chenhall 2003). PMSs are now seen as playing an active and enabling role in strategy definition (see Hansen and Mouritsen 2005; Jørgensen and Messner 2010; Skærbæk and Tryggestad 2010).

The increasing attention given to the relationship between management controls and strategy has also highlighted that strategy and PMSs do not necessarily serve only the interests of top management, but they also have enabling and unplanned effects. Reinforcing previous studies

¹ “Rhetorical machines” are visual diagrams, which in classical rhetoric have assisted in the organization of knowledge and its continuous re-invention thanks to the use of common templates that have taken on various reconfigurable graphic formats (e.g. wheels, hierarchies or trees, grids or matrixes). Hence the term ‘machine’, as the Latin term *machina*, addresses anything that helps the construction of something, including knowledge and meaning. We return to this point in Section 3.

that have looked at accounting in general, (Ahrens and Chapman 2004; 2007; Busco, Giovannoni, and Scapens 2008; Catusus, Gröjer, Ersson and Wallentin 2007; Free 2007), research has revealed the enabling, rather than simply constraining, power of performance metrics in supporting those people whose performance is being measured (Wouters and Roijmans 2011). In relation to the BSC, Wiersma (2009), for instance, has pointed to the multidimensional usage of the BSC, identifying its positive role not only in helping rational decision making but also in favoring coordination and self-monitoring (see also, Malmi 2001). Beyond simple measurement needs, these enabling effects can potentially explain reasons for PMSs and accounting adoption and use within organizations (see Ahrens and Chapman 2004; Wiersma 2009).

In this respect, for instance, Skærbæk and Tryggestad (2010) have highlighted an active role for accounting in strategizing (see also De Gueser, Mooraj and Oyon, 2009). In the same vein, Hansen and Mouritsen (2005) noted how rationales for BSC adoption become clearer only when new uses for the BSC are discovered and new notions of strategy emerge during the process of BSC implementation. The process of BSC implementation is thus always generative and the outcome of the skirmishes between accounting and strategy is always uncertain and not unidirectional (Jørgensen and Messner, 2010). The BSC also requires a gradual process of refinement (Tomuela 2005) and therefore its nature, both as a normative management solution, and as a management practice is evolutionary (see Speckbacher et al. 2003; Malmi 2001; Qu and Cooper 2011).

These studies illustrate how the BSC has evolved from being conceived as a truthful instrument of representation of a given strategic vision, when theorised in abstract terms (e.g., Kaplan and Norton 1996), to an instrument utilised for generating organizational action, when observed in practice. The literature that has stressed the enabling nature of management controls and PMSs has often pointed out how these systems evolve to facilitate the involvement of managers in the design of the system to reach agreement (Abernethy, Bouwens and van Lent 2004), transparency so that it can be tailored to users' needs (Wouters and Roijmans 2011, p. 5) and alignment of users' needs with organizational goals (Adler and Borys 1996).

The literature reviewed above is useful for the aims of this paper because it illustrates how the BSC plays multiple functions, and how the rationales for its adoption and use are constantly unfolding. Paraphrasing Hopwood (1987), the BSC has the tendency to become what it was not.

However, there is, to date, no comprehensive theoretical framework that explains *how* this unfolding happens. This unfolding is normally theorized (see Chennall 2003; Malmi 2001; Speckbacher, Bischof and Pfeiffer 2003) by emphasising the influence of exogenous variables (typically, human agency - that is, the capacity of human beings to influence the world -, contextual and contingent factors - such as the firm's size, the economy, strategy and the like), or to its relation with some other practices (such as Activity Based Costing) or technology (such as Enterprise Resource Planning systems), rather than to the features of the BSC as visual inscription.

Stressing the incompleteness and insufficiency of accounting visualizations (Jørgensen and Messner 2010; Wouters and Wilderom 2008) could be a possible starting point for theorizing how this incompleteness generates action and the characteristic continuous unfolding of the BSC (see Knorr Cetina 2001).

Research shows that organizations are not frequently characterised by situations where managers share transparent information and reach agreement (Cooper, Hayes and Wolf, 1981). Rather, organizations are often characterised by knowledge opaqueness where links between information, actions and results are not clear (Jørgensen and Messner 2010), and collective objectives, needs and interests, as well as the means-ends relationships are not well understood, highly uncertain and always in the making, diverse and in conflict (see Chua and Mahama 2007). Other authors have looked at how the incompleteness of PMSs (Wouters and Wilderom 2008) always leaves room for disagreement over strategic courses of action due to the high uncertainty of the relationships between measures and strategic actions (Jørgensen and Messner 2010, p. 185), the methodological opacity of performance measurement procedures (Dambrin and Robson 2011) and the fragility of chains of performance measurements (Chua 1995; Qu and Cooper 2011). In these situations, accounting plays roles other than knowledge production (Burchell et al. 1980) and always acquires new features that add to the existent ones.

As visual inscriptions, PMSs translate performances and organizational processes and realities into numerical signs. They are representational devices which remind us of the difficulty of designing a complete system of representation. Beyond any philosophical argument, designing “a perfectly complete PMS” is a task that “remains challenging, if not impossible, and would require nothing less than the expression of all the aspects of performance in quantitative terms” (Wouters and Wilderom 2008, p. 491; see also Lillis 2002).

The review of the above literature suggests that the engaging power of the accounting inscription does not, and cannot, come from its (incomplete and imperfect) representational capability.

In exploring the agency of visual diagrams such as the BSC, in order to understand how rationale for its use unfolds, we mobilize the concept of rhetorical machine to explore and understand how visual inscriptions (see Robson, 1992; Dambrin and Robson, 2011; Qu and Cooper, 2011, for thorough reviews) can contribute to the management of knowledge creation, diversity and disagreement beyond representational purposes.

3. Theoretical framing: the power of rhetorical machines

Rhetoric is mainly considered to be a technique of persuasion concerned with language and discourse (e.g., Arrington and Schweiker 1992; Aho 1985; Carruthers and Espenland 1991; Nørreklit 2003). However, studies in the remote field of literature (see Bolzoni 1995; Carruthers 1998) help us understand historically how rhetoric made ample use of written and mental visual images in processes of knowledge construction and communication. These images aided orators in remembering the speeches they were to deliver (Bolzoni 1995, pp. xvi-ii). They could take the most diverse forms: analytical spaces, hierarchies (or *trees*), logical maps and wheels, most of which are still widely used (such as accounts, hierarchies, strategy maps, and the BSC itself) by managers in daily life to make sense of their organisational worlds (Craig 2000; Lowy and Hood 2004). All of these images also constitute key elements of the BSC’s graphical design and functioning. It is thus potentially important to better understand how they worked and were used in

order to assess whether we can learn more about how these visual designs are used today, and what effects they produce.

These images were also called rhetorical “machines” (Bolzoni 1995), in which the Latin term *machina* was not synonymous with ‘mechanical’ and ‘predictable movements’, as we now would conceive it, but referred to anything that aided in the construction of something, be this a building or a thought. Rhetorical machines were, therefore, meant to mobilise action and did not represent memories or stored knowledge.

Amongst these ‘machines’ (Bolzoni 1995), one image has a particular relevance for the aim of this paper: the wheel (see Bolzoni 1995, pp. 65-73). The rhetorical wheel is a circular pictorial representation that helps orators organise and deliver their speech. The orator sets out to define the topic to be discussed, for example, love, and then to prepare an inventory of cards, that is, a number of pieces of paper on which s/he can define various subtopics that in his/her view define the concept of love (e.g., passion, affection, etc.). Then s/he places the main topic at the centre of the wheel and surrounds it with, say, four cards taken from the inventory previously made, in an order that facilitates the engagement of the audience.

In this displacement of cards, the rhetorical wheel does more than simply create an inventory of arguments to be dealt with in a speech: this inventory of cards and arguments is the precondition for inventing new knowledge and developing innovative arguments.² This method makes the central theme of the rhetorical machine, for example, love, always fluid, since its meaning depends on what cards surround the centre of the wheel, how many there are, and in what order they are placed. If, for instance, while delivering the speech, the audience raises an unexpected question, the orator can go back (physically or mentally) to the inventory of cards prepared earlier and choose an appropriate topic that can replace, or be added to, the existing cards. This process then favours the construction of an argument to be used in the answer, and if there is no card which can help, a new one can be created.

² The Latin word *inventio*, which is also the first canon of classical rhetoric, is the base for two different words in many contemporary languages: ‘inventory’, the familiar accounting technique, and ‘invention’ (Carruthers 1998, p. 11).

Rhetorical machines as knowledge ordering devices helped deploy logical, persuasive and therefore rational and logical arguments (Green 2004). They had a crucial spatial connotation (Galison and Thompson 1999) as they aided knowledge classification and invention through the use of visual and spatially based schemas, and allowed ‘*re-presentations*’ designed for being open to interpretation, appropriation and translation,³ beyond any stable and ultimate form of objective and univocal truth. Being pragmatic means of communication that aimed at the acquisition of transcendental truths, rhetorical images, as well as inscriptions, were not intended to convey objective and immutable representations, meanings and messages. Instead, they were forces (Fabbri, 1998) and had an agency in making users do things with them.

This excursion into the history of rhetorical practices is useful for the aim of this paper because it aids in understanding the way in which we have framed our empirical work and why we have selected particular pieces of evidence that relate to the theoretical issues that we wish to address. It also helps in the articulation of the ability that inscriptions have in making people constantly refer to an entity (be this ‘love’ or a ‘strategic vision’), while this entity is in a constant state of flux, consequently providing cues on how to articulate the power of inscriptions through structures that instill hope and a belief in the prospective user, keeping the BSC stable while carrying out a series of constant transformations.

4. Research methodology and case study details

A narrative approach to inform data collection and analysis

Czarniawska noted that field research is about collecting and producing texts (1998, p. vii). Our field study developed along very similar lines: we listened to interviewees recounting their stories, read company documents, and then wrote field notes and more formalised accounts of what we heard, read and observed.

³ We draw on the definition of “translation” as in Latour (1999, p. 179), that is, a “displacement, drift, invention, mediation, the creation of a link that did not exist before and that to a degree modifies the original [meaning]”.

When studying organizations as narratives, attention cannot be limited to a linguistic practice of producing words: “There is more to it than ‘just talking’. [...]texts are actions (strictly speaking, material traces of such, but they result from action and provoke further action), and actions are texts in the sense that they must be legible to qualify as action” (Czarniawska 1998, p. 11). In building our narrative we have, therefore, paid attention not only to texts as expressed by organizational actors, but also to actions generated by visual diagrams.

This attention to the BSC as visual diagram and its agency also qualifies the kind of ‘literary genre’⁴ that we want to enact and observe in our field study. This genre in our field study is made up of a specific kind of rhetoric, namely, one that gives prominence to formal and visual practices of knowledge classification and invention (and not by one that gives emphasis to the role of individuals in utilising rhetorical figures to convince an audience). We aim to highlight a different genre of rhetoric (which relates texts, images, and actions), and also a different genre of text-as-action that populates organizational worlds and whose functionality is now taken for granted. These texts-as-actions are also in need of being studied by going back in history to the point in which these visual techniques of knowledge organization were devised, hence the reference to historic works on rhetoric included in the previous section and the attention paid to various visual artefacts in constructing the MEGOC case in the following sections.

If a linguistic analysis of texts seeks to establish a correspondence between word and meaning, and if a literary analysis makes this meaning emerge from the relationships that words have with other words in a narrative context (Rorty 1979), then with this study we have sought to perform a semiotic analysis in which not only texts, but also images and various other utterances, become central to the BSC narrative. These should be studied for the effects they generate rather than for the meaning that they supposedly contain or that is attributed by the user (what Fabbri calls a “semiotic turn”, 1998).

In the following section, we introduce the case study by illustrating how the empirical evidence was collected and analyzed.

⁴ A literary genre is defined as “a system of action that has become institutionalized and is recognizable by repetition” (Czarniawska 1997, p. 49).

Case study details

The case study concerns the implementation of the BSC within MEGOC⁵, a large corporation operating in the oil and gas industry with operations in exploration, production, refining and marketing. MEGOC employs over fifty-five thousand employees and approximately an additional sixty thousand outside contractors⁶. The company is controlled by the national government and the revenues generated constitute a large part of the GDP of that country. MEGOC is divided into seven major divisions (or business lines): Exploration & Production; Gas Operations; Refining, Marketing & International; Engineering & Operations Services; Law; Finance and Industrial Relations. In addition, support functions include Corporate Planning, Information Technology (IT), Human Resources and Management Services.

As often happens, the choice of the site where the field work is conducted and in which the case study developed is driven by many variables, some of which are serendipitous (such as, for instance, the access granted, see Hirsch and Gellner 2001) and others are practical (see Marshall and Rossman 1999). In our specific circumstances, serendipity and practicality both played a role. The company provided us with substantial access to written and visual material (e.g., slides utilized in presentations concerning BSC implementation, guidelines, minutes of meetings and consultants' documents) that were crucial in articulating the power of inscriptions in the context of BSC implementation. This was complemented by interviews and observations, as illustrated below.

Data Collection

From May 2003 to December 2005, and again in 2008, empirical evidence was collected through interviews, written and electronic documentation, non-participant observations and participation in internal workshops. We relied on the interviews and on the documentation collected as the main

⁵ MEGOC (Middle East Gas and Oil Company) is the disguised name of the company.

⁶ This data describes the company in April 2013, and is in line with the data that characterized MEGOC at the time that the study was developed.

source of data, with observation and participation in internal workshops mainly for triangulation and supplementary sources for our understanding. At the outset of the study, MEGOC was in the middle of implementing a series of new tools and innovative management systems (such as SAP and the BSC) to support the new mission and strategic direction formulated by the Board.

For this reason, the first round of interviews was aimed at collecting information concerning the introduction of new corporate strategic imperatives, as well as the initial wave of BSC implementations within the organization. The research began with preliminary meetings involving managers at Corporate Planning, and employees of those divisions that were presented as early adopters of the BSC (i.e., Industrial Relations, Engineering & Operations Services, IT and Human Resources), and those involved in the process of diffusing the BSC within MEGOC, such as the Internal Consulting Department and a number of divisional and departmental BSC teams. These meetings providing essential background about the company, allowed us to collect various forms of documentation on the process of the BSC's adoption within MEGOC, and offered a preliminary illustration of MEGOC's management systems.

During these interviews the architecture and the functioning of the new management system constituted the primary subject of our conversations. MEGOC is a vast organization with diverse networks and it was immediately clear from the first round of interviews that BSC implementation did not follow the same pattern in all the divisions and departments. Therefore subsequent rounds of interviews, as well as participation in internal workshops, were used to explore and understand the diversity in dealing with BSC implementation. The case study focused mainly on the following divisions: Engineering & Operations Services, Finance and Industrial Relations.

Overall, the study was composed of 49 interviews with managers and employees operating in various divisions of MEGOC (see Table 1)⁷. The initial discussions were held with managers and BSC coordinators, with subsequent rounds that also took place with employees who were

⁷All interviews were conducted in English, which is the official language of MEGOC. Additionally, all documents, texts and charts provided by the company were in English. No translation was required at any point during the development of the case.

approached for follow-up interviews on specific issues after the internal meetings, such as the monthly BSC review sessions or the BSC awareness workshops. The interviews were open-ended to allow interviewees to elaborate on the reasons behind the adoption of the BSC. The interviews typically lasted between one and two hours. Certain individuals were interviewed more than once in order to clarify key issues which emerged as the study progressed. To stimulate an open dialogue and avoid bias related to potentially controversial or sensitive issues, it was suggested by the interviewees, and agreed on by the researchers, not to record the interviews. However, extensive notes were taken and transcribed immediately after each meeting⁸. The quotations presented in the following pages have been extracted from these notes. Documentary material, including company history, brochures, newsletters, internal workshop material, memos, press releases and other published material were collected when possible, and triangulated with the interviews. Significantly, this additional documentation proved to be helpful as a tool for engaging informants in specific discussion during the interviews. These peculiarities provide further evidence of the BSC's multiple features and rationales for use in the architecture of the new management systems within MEGOC.

[INSERT TABLE 1 AROUND HERE]

Finally, although MEGOC is an organization characterised by a significant number of expatriates (13 per cent of the total workforce), which also represented approximately 30 per cent of our interviewees (the majority of whom were middle-managers), it is logical for us to consider the possible impact of the Arab culture and Islamic religion on the specific case setting that we observed, and on the empirical material collected. In particular, *collectivism* and *consultation* are two principles of the Arab culture and Islamic religion to which we have given specific attention, especially because consultation in practice often means impression of consultation (Yousef 1998).

Next, we illustrate and discuss the case material in order to gradually build the analytical theoretical framework we intend to propose.

⁸ Notes were taken by one of the authors who is a qualified stenographer. This assured accuracy in note taking and in reporting longer extracts from interviews in the body of the article.

5. Articulating the power of inscriptions through the MEGOC case

How inscriptions generate engagement: the BSC as a visual performable space

In 2002, following the national government's call for action to improve the local economy, MEGOC's executive management board redefined the strategic direction of the company in order to "significantly increase its contribution to the country's revenue needs and consistently promote the development of the local economy" (MEGOC's mission statement). The government's imperative for making the company an organization that is focused on a strategy of revenue growth and local community development was translated into six strategic imperatives: 1) Transform Corporate Performance; 2) Optimize the Corporate Portfolio; 3) Maximize Revenues by Capturing Oil Growth Opportunities; 4) Protect the Future Market for Oil; 5) Leverage the Oil and Gas Resources to expand the National Economy; 6) Prepare the Workforce for the Future.

These six strategic imperatives constituted the central core of the BSC, which was presented as a useful management tool for searching for a solution to national problems and, eventually, to MEGOC's business challenges. The BSC took the shape that is familiar to many accounting scholars: a circle surrounded by four boxes.

As a manager in the Industrial Relations Division stated: "[the BSC] was presented and promoted in wall-charts and flyers as a framework to communicate strategic performance expectations and help the company translate strategies into key objectives and initiatives that drive behavior and performance".

However, the leaders of the Engineering & Operations Services (E&OS) Division found that the corporate strategic imperatives were not easy to communicate and link to the division's operations. The E&OS BSC team leader explained, "employees were often unaware of what the strategy meant to their individual work and how they could help in achieving the strategic objectives of the company". MEGOC's six strategic imperatives meant very little to a large number of managers and employees, who were not directly involved in their definition. As emphasized by an E&OS manager after having attended a BSC 'measures awareness' training session:

First, only a few people seemed to be aware of the way that their job impacts on the achievement of the company's strategic objectives; second, the consensus across divisions and departments was limited, and notions such as 'Corporate Performance' or 'Prepare the workforce for the Future', which to me seemed taken-for-granted, were far away from being agreed upon.

This statement was reinforced by the comments of a rather sceptical Finance manager who attended the same session:

When we were asked to sum up how we think our departments should add value to [MEGOC's] strategy, no one mentioned accurate planning, cost savings and revenue increase, and that was quite disappointing because at the end of the day these issues are what business is all about, aren't they?

The corporate imperatives and the BSC as a strategic performance measurement system were surrounded by vagueness and confusion, and a common understanding was far from being put in place.

The vagueness of the corporate strategic imperatives and of the ways in which these were to be linked to the BSC's perspectives, objectives and KPIs had some advantages though. At the end of an intense monthly BSC team review session, a member of the E&OS measures team⁹ invited one of the authors to his office to have a look at what he referred to as his "playground". He switched his lap-top on, logged-in the SAP system and then opened the SAP Corporate Performance Monitor platform – an application that integrates the information coming from all different SAP modules into the BSC. Then he double-clicked on 'my Balanced Scorecard' from the options available on the menu, and began his illustration:

This is the place where objectives, measures and initiatives are controlled. I can visualize and analyze the status of goals, targets, and budgetary expenses at my convenience. The

⁹ Within MEGOC's divisions there were three teams involved within the implementation of the BSC: the Leadership Team (responsible for setting the strategic direction and defining the objectives of the division), the Core Team (responsible for coordinating inputs for the monthly BSC meetings), and the Measures Team (responsible for developing a meaningful set of measures).

objectives and KPI definition illustrated in this catalogue [he handed a booklet over to the researcher] are brought to life here, where the different components that define each measure of the BSC can be regularly monitored.

Significantly, as he continued to ‘play’ with the BSC on his lap-top and to illustrate his responsibility – as a measures team member – to use his business awareness for maintaining a meaningful set of measures within his department, an additional option of the SAP system, (referred to by the interviewee as the “measures builder” session), became central in the discussion, as seen in the following excerpt:

The catalogue of objectives and KPIs offers us a baseline, but what I love to do is to spend some quiet time in this office in search of refinements for our BSC. If you look at this option on the screen you can see the *Measures Builder* function. This is a feature that opens up the possibility of creating new measures. I often use this to experiment, to link together different data and concepts. I develop, modify, mix and erase measures. I feel like a cook here. I have several available ingredients in the system that may potentially determine the business meaning of a new and more refined measure. I just have to blend them through the proper formula. It takes several attempts to develop a new recipe, but when I sense I am on the right track I always bring a sample of my new creations to the next BSC meeting for a sample tasting. Most of the time they do not like what I propose, or I realize there is another ingredient to be added, and that is why right after the meeting I am often back in the kitchen – like today!

This possibility of playing with the BSC, strategy maps and KPIs was also stressed and made visible at the end of an internal workshop on the role of the BSC and strategy maps for the achievement of MEGOC’s strategic imperatives. There a member of the E&OS BSC core team pointed to a chart reproduced in Figure 1¹⁰, which reported the strategic imperatives on the

¹⁰ This exhibit was used during a training workshop. Figures utilised in this paper are drawn from the original material used in various meetings, presentations or training sessions by MEGOC managers and employees, unless otherwise specified.

horizontal axis and the BSC perspectives on the vertical axis. He concluded the meeting as follows:

[...] and now *it is up to you* and your department leaders to find the proper objectives and measures to make sure you can orient yourselves, and show how you can add value on the [MEGOC] strategic map [*emphasis added*].

[insert Figure 1 about here]

Theorizing the first feature of the BSC as rhetorical machine: a visual performable space

The quotes of the E&OS, Finance, and HR Division managers recalled above illustrate how the BSC became an engaging practice that was performed not because it had a univocal purpose to achieve (i.e., making the six strategic imperatives operative through a series of KPIs linked to the four perspectives surrounding them), but because it offered a space in which objectives and measures could be defined and appropriated by various users and for various reasons. The BSC was what the member of the E&OS BSC measures team defined as a ‘playground’ that was ‘up to the user’ to be utilized (member of E&OS BSC core team). In MEGOC, the BSC and the associated strategy map, despite being instruments of performance measurement, did not clearly define what was meant by ‘performance’ but left this definition open to the users (see Figure 1).

Therefore, beyond simple representational purposes, the BSC is firstly a *visual performable space*, that is, a schematic visualization that engages users by offering them a space in which they can perform a work of strategy composition, where they can imagine various meanings for abstract strategic imperatives, objectives, KPIs, and the possible links between them (Czarniawska 1998). In this sense, the BSC, both as a strategy map and a rhetorical wheel (Bolzoni 1995), is an inscription (Robson 1992; Qu and Cooper 2011) that not only is the result of managerial action but, above all, creates the conditions for further action and engagement. In MEGOC, the strategy map reproduced in Figure 1 offered a starting point and constituted an engagement mechanism with which to play and invent new solutions to old and new problems. By asking users to translate qualitative information (strategic imperatives, perspectives and objectives) into quantitative information (measures and targets), the BSC engaged users and made them act. The simplicity of

the BSC as visual performable space promoted the work of linking strategic imperatives (the horizontal axis in Figure 1) with BSC perspectives (the vertical axis) by fostering an interrogation about what the objectives and KPIs define, that is, strategic imperatives and perspectives. Therefore, the BSC is not only a stable instrument of representation but also an active force (see Fabbri 1998) that, thanks to a visual schema (and the incomplete definition of strategic imperatives and perspectives, see Wouters and Wilderom 2008) generates action by making users strategize (Chapman 2005), linking figurative spaces, numbers, perspectives, and strategic imperatives.

The visual performable space represents the first component of the BSC as a rhetorical machine (see point 1 in Figure 2)¹¹, and helps illustrate how BSC measures and KPIs, which always remain partial, incomplete, and opaque, manage to engage users.¹²

[insert Figure 2 about here]

Does performing the visual space offered by the BSC and the related strategy map lead to a shared understanding of strategic imperatives, objectives, and measures amongst MEGOC's members? In the following section, we will illustrate how performing within the BSC's space entails a homogenization of methods of ordering knowledge and innovation, but does not produce a shared understanding of these imperatives, objectives, and measures.

How inscriptions generate shared procedures but different contents: the BSC as method of ordering and innovation

While walking along MEGOC's corridors, it was quite common to find statements that attempted to communicate the BSC's 'spirit' and the overall purpose of the new management systems that were in place. Corporate Mission and Vision, Strategic Imperatives and Objectives, Measures and

¹¹ The features of the BSC as rhetorical machine in Figure 2 are progressively numbered only for written and analytical purposes but any one feature is not theoretically more relevant than another.

¹² Obviously, the use of clear and well defined measures would not be theoretically surprising as they would functionally serve a clear representational purpose. However, research shows that this clarity and unambiguity is difficult, if not impossible, to achieve (Wouters and Rojijmans, 2011).

key initiatives were promoted in many ways, including posters and desk calendars. The text reproduced below was posted on several walls of a leadership development centre:

The Balanced Scorecard will help us translate our strategic imperatives into real action. [...] The foundations of the scorecard are the mission, the vision and the strategies. Any participating business line develops a Strategy Map that describes the way in which objectives are in line with the strategic imperatives. By studying this map, you will be able to identify where you fit into the company's plan for realizing its vision.

Before the start of an internal workshop on the BSC, an E&OS senior manager pointed to a chart¹³ on the training room wall to illustrate the division strategy map to one of the researchers:

These are the objectives that were highlighted in the 2003 E&OS Operating Plan presentation. Horizontally they are organized according to the four balanced scorecard perspectives. Vertically they are organized by strategic imperatives. Like any good map, it has coordinates for both longitude and latitude!

However, such representations (e.g. wheels, grids) do not constitute the only guidelines for framing behaviour. They also generate innovation, as the following example illustrates.

The Industrial Relations (IR) Division pioneered the implementation of the BSC in MEGOC long before the government's call to redefine the company's overall strategy in 2002. A manager from IR praised the BSC introduction because it had contributed to the integration of the division into the whole corporation and also for providing a common platform for monitoring the various services provided. The scorecard they had in operation before the launch of the new corporate strategic imperatives was centered on four relevant themes: Maximize Company Potential, Quality Services, Optimize Net Direct Expenditures, and Asset Stewardship. These four key themes and the associated objectives were the result of an intense process of negotiation among the different IR departments.

¹³ A chart similar to the one reproduced later in the paper - see Figure 4.

Thus, when the six corporate strategic imperatives were released by the board in 2002, IR had to re-adjust the existing scorecard along the lines of the new imperatives. A member of the IR BSC team commented:

I was a bit concerned when we had to re-organize our Scorecard in light of the new corporate imperatives [...]. However, and to my great surprise, despite different views on possible objectives and KPIs, during the meetings [...] most of the people acted as if they knew what they had to look for, searching for sound cause-and-effect relationships to feed into a reliable strategy map.

In trying to square the circle, one of the IR Division departments, *Facility Management*, was attempting to redesign the BSC, taking into account specific features of the division. While sketching on a white board what he presented as innovative thoughts, an IR manager noted: “we feel it is time to update the [BSC’s] contents by including new perspectives and objectives that are able to capture the new areas in which we have to deliver to the government and the board. [...] This is what I believe our second-generation scorecard should look like”. The new version of the BSC included two further dimensions - the Nationalization¹⁴ and the Health, Safety and Environment perspectives – added to the standard four that the BSC presents.

Theorizing the second feature of the BSC as rhetorical machine: a method of ordering and innovation

Wheels (such as the standard BSC visual format), grids (in the form of a strategy map), and trees (as in the simulation exemplified in the previous section), are all rhetorical figures that offered users something concrete and, at the same time, general enough to which they could relate, in order to visually imagine what the strategic imperatives or objectives might mean to them. They did not have a stable or univocal meaning that represented some kind of overarching organizational and national goal. Rather, these rhetorical figures were composed of an inventory of the issues at stake and offered a series of options on how to get from one place to another (by

¹⁴ The real name of the perspective has been modified in order to avoid disclosing the country in which MEGOC is located.

providing, as illustrated above, ‘coordinates for latitude and longitude’ that were useful for orientation on the map).

However, these figures always leave the final choice of how to move in the space that they create to the user. As with the map illustrated in Figure 1, in spite of there being a number of possible paths, the choice of which route to follow is up to the traveler. The BSC concentrates on *how* one should construct the representation rather than on *what* one needs to represent and offers users a method for creating order amidst various strategic perspectives and their possible connections.

As for the functioning of the rhetorical wheel mentioned in section 3 (see Bolzoni 1995), this displacement of perspectives and objectives around the BSC’s core was not a simple and neutral addition as it relationally re-defined the strategic imperatives that the BSC was supposed to implement, and that are instead modified by the change in the graphical arrangement of the BSC. Within the IR Division, for example, the addition of two new dimensions and the new display of the BSC also changed the meaning of these imperatives, which acquired significance only in relation to the various perspectives and through the links in strategy maps. Abstract concepts such as ‘integration’ can be articulated in different ways, in as much as a narrative can link events in different ways depending on the plot, bringing some coherence to the story to which integration is linked.

But this business narrative can only be articulated in a plot (see Czarniawska 1998) thanks to the power of the BSC as an inscription that provides a *method of ordering and innovation*, that is, a visualization that is worthwhile not only for the content that it carries but also for providing managers with ways to establish logical paths between the various abstract concepts that become more concrete through this visualization. This characteristic of method constitutes the second feature of the BSC as a rhetorical wheel (see point 2 in Figure 2).

Consequently, the BSC is more than a simple representation of business performance. The BSC as a visual performable space and as a method of ordering also leads people to ‘figure out’ new solutions (new perspectives and objectives to be introduced), new viewpoints to problems, in ways that were not prescribed by the designer of the system, thus leading to innovation.

These visualizations also constitute a specific narrative genre (cf. Czarniawska, 1998). In this genre, calculations intertwine with figures, and the composition of strategy is made with numbers *and* figures. It is this link between numbers and figures that enables graphical representations to provide a rationale and a rationality to the whole process of strategy composition (see Doganova and Eyquem-Renault 2009; Quattrone 2009; Thompson 1998).

It is, therefore, this specific way and ability to deal with figures and numbers that has nowadays become common practice (see Chua 1995; Goody 1977) and that is shared among the participants in the process of BSC implementation. There is not a supposedly existing notion of performance common to all of MEGOC's managers, and on which they can even momentarily agree. What is shared is the mechanism through which this strategy composition happens. It is this further articulation of the accounting inscription as process, as force and action that generates effects (Fabbri 1998) and not as a representational sign, that allows the explanation of the continuous evolution and sustained unity and use of the BSC.

The following section focuses on how the BSC provides ordering and innovation through a language of interrogation that does not seek shared understandings, but rather supports the generation of diversity within the remit of its visual performable space and method of ordering and innovation. This helps us to avoid falling, again, into the trap of conceiving of the BSC simply as an instrument of representation that produces shared understandings.

How inscriptions generate diversity and compromise: the BSC as means of interrogation and mediation

In 2003 the E&OS senior Vice President (VP) promoted *Café 03*, as a way for fostering collaborative dialogue among large groups. This culminated in over seven hundred members from across the four E&OS departments gathering in an airport hangar to discuss the design of the BSC to be implemented.

The following year, the exercise was repeated ("*Café 04 - Creating the future, one conversation at a time*") and the event hosted some of the key suppliers and customers of the

E&OS Division, along with several delegates from other MEGOC business areas and divisions.

E&OS' senior VP opened *Café 04* with his 'Clarity of Sight' address:

What is the corporate strategic direction? *What does it mean to you?* [...] What are the things that [MEGOC] must do? [...] In E&OS we have created a map, a strategy map, to help us go where the company needs to go. Can you see how it aligns our direction? Are we good problem solvers? What new ways of thinking do we need to learn in order to create the future that we want? (E&OS senior VP, as quoted by an E&OS senior manager during an internal seminar; *emphasis added*).

The E&OS Strategy Map, and the accompanying Power Point slides, represented one of the key resources for prompting conversations in the *Café*. As an E&OS senior manager emphasized:

The *Café* conversations offered opportunities for thinking and being different, and the Scorecards and Maps were employed in order to describe and communicate this potential future action and behavior.

But how did the *Café* create these opportunities? And what were the outcomes of the process? The language of interrogation enabled participants to reflect, offer their individual perspectives and listen to what was emerging from the dialogue. This emphasis on interrogation, which encouraged MEGOC members to engage in a sense-making process prompted by BSC graphical inscriptions, resulted in several outcomes and generated various effects. However, these did not necessarily lead to the definition of a shared and stable understanding of what the BSC was and should do. For example, an E&OS engineer, in recalling his experience in one of the *Cafés*, argued:

During the *Café* conversations I sat down at four or five different tables [...] As I moved from table to table I carried and shared my notes and charts on how to improve process redesign and on the key measures to be monitored. I built on the experience shared at previous tables to gather allies at the new tables and convinced them about what apparently seemed to be winning ideas, compared to those at the first table [...]. After four rounds of discussions at four different tables, a colleague from the Legal Division smiled at me saying he was just coming back from the table where I had started and that there was not

much left of my legacy over there. So I went back to check and found that the skeleton of the strategy map I had drafted earlier in the morning was still there on the table, but the contents in terms of objectives, measures and targets had completely changed.

As exemplified by the quote above, sharing a common language of interrogation did not necessarily lead to agreement on the same strategic visions and performance measures. However, the multiple and relevant discussions generated around the BSCs and the associated strategy maps contributed to developing and maintaining a continuous process of inquiry and reflection that ended up affecting the perception and the consideration of this organizational practice. This was also the case in the Finance Division, whose original hostility towards the BSC vanished over time as new leaders realized that the division had possibly been excluded from significant conversations going on within MEGOC.

Early in the adoption process, several members of the Finance Division perceived the BSC as an 'operational tool' which *some* business sectors were *eventually* implementing to measure *other* types of performance under the supervision of the Corporate Planning area. The Finance Division, at least initially, interpreted the BSC as a *non-core* initiative and, more importantly, as potentially disrupting of the existing (accounting-driven) working practices. The skepticism of the employees of the Finance Division emerged rather clearly from the interviews:

I know some divisions are implementing the Balanced Scorecard [...], but we do not get involved with that. We don't even have our own scorecard. [...] Ultimately, what is the connection between the scorecard and the budget? I do not see it, yet. Here the budget is king [...]. Indeed, you can say we focus on one perspective [financial], and we are happy to leave the other three to the rest of the company (Senior accountant).

In 2005, the ideal of better integrating the various divisions of MEGOC was still at the top of the agenda. Despite its initial hostility to the Balanced Scorecard, the Finance Division displayed an active role in fostering cooperation and knowledge sharing across the company. In particular, a series of workshops were developed to illustrate the importance of using financial metrics and relying on finance experts for achieving effective organizational integration.

Addressing the audience of a quarterly BSC–Budget *integrated* review session, a senior management accountant suggested the following:

In each one of your scorecards you reach a point where operational metrics get translated into financial terms. Well, we can be your partner there [...]. We have a brand new ‘Full Cost Reporting Project’ that will help fuel your scorecards with accurate numbers, and aid a better translation of operational achievement into bottom-line results.

Within MEGOC, a number of skeptical accountants have now become BSC enthusiasts thanks to the discussions generated by BSC implementation and use. More importantly, enhancing participation in the conversations on and around the BSC enabled the Finance Division to re-affirm its role within the new MEGOC management system.

Theorizing the third feature of the BSC as rhetorical machine: a means of interrogation and mediation

The process described by the E&OS senior VP during the *Café* was not intended to convey an objective and immutable message. It was, instead, meant to generate organizing work by enabling the user to develop an associative ability which ultimately ordered and created performance measures by rearranging relations between texts (the six strategic imperatives, and the four, or even six, perspectives, defining what was meant) and images (the common visual design of the BSC with a central core and some cards surrounding it).

Through the *Café* conversations, rather than by simply presenting top management prescriptions and easy solutions, the BSC and the associated strategy maps informed a process of inquiry, reflection, and exploration that made strategy emerge from the conversations that were happening in the *Cafés* (and elsewhere), entailing the translation of the imperatives into something different.

This process of questioning abstract and vague concepts such as the ‘strategic imperatives’ and ‘objectives’, in order for them to acquire meaning, is particularly important for addressing issues of adoption and use. It is only by seeking to answer the question of what these imperatives and objectives are, and what their causal relations with the various performance dimensions and

with the KPIs could be, that participants in the project initiate a process of definition, in which they have ownership. Thus they feel that they are a part of the whole project, and are preparing ground for embracing these concepts, since ultimately they created them by continuously translating them into something that is meaningful to each of them (but not necessarily to all of them in the same way). This translation is what also prepares the ground for a mediation between different, and at times opposing, interests.

The Power Point presentations (see Doganova and Eyquem-Renault 2009; Kaplan 2011), the whiteboards, the notes on the tablecloths, the SAP system where the BSC was managed and also the budget and the costing system which were soon linked to the BSC, all constitute objects which are shared (as a boundary object, see Wouters and Roijmans 2011). However, they do not necessarily produce a shared understanding and an alignment of interests (see also Boedker 2010 on how controls do not generate alignment and harmony). When the E&OS engineer goes back to his table, he finds that the content of the BSC has been changed, or ‘translated’ into something else. He finds the content of the BSC changed in terms of measures and targets as the result of the conversations which occurred after he went to join another table. This translation, nevertheless, happens on a continuous basis and at various organizational levels. This means that the BSC works as a method of ordering and innovation, but it does so because it relies on, and prompts, a continuous process of interrogation amongst the parties and not because it channels people’s understanding in a common direction. The BSC, as means of interrogation, makes mediation possible since it questions, for instance, strategic visions, therefore making it easier to start a dialogue between potential adopters and users.

However, this process of interrogation and mediation cannot simply happen in managers’ minds. It requires, it is facilitated by, and it is constrained by the BSC as a visual performable space and as a method for ordering and invention. These two features both allow and constrain the process of interrogation and mediation. Whether we are in the presence of the visual shape of the wheel, the grid of the strategy map, or the tree of the simulation, these two features of the BSC combine two apparently irreconcilable functions. On one hand, they delimit the possibilities of imagination (they create boundaries) since, for instance, the company could not realise value in

ways that contradict national policies and already consolidated interests. Thus, this means that various parties involved in the process of BSC implementation have to agree on what the BSC has to deliver and why. On the other hand though, the incompleteness of BSC representations creates a theoretically infinite number of possibilities for imagining new and unforeseen relationships between key strategic imperatives, perspectives, and KPIs. These possibilities are explored through the BSC language of interrogation and permit a mediation that would otherwise be impossible if, for instance, KPIs and their relations were well defined and fixed in stone.

This is why we have identified a further key feature of the BSC as rhetorical machine, namely, *its nature as a means of interrogation and mediation*, that is, a means that creates knowledge not by providing answers to its users (be it in the form of numerical performance measures or stable logical relationships), but rather by making users ask questions that continuously open possibilities for new knowledge to be constructed, making the BSC a platform for mediation between various users at different levels (see point 3 in Figure 4). This process of interrogation is also about making and keeping the definitions of strategic imperatives and KPIs open. This is possible because of the (epistemological) impossibility of a complete representation within a unitary system of performance measurement that could satisfy MEGOC's various functions, divisions and individual managers (Wouters and Roijmans 2011). It is this incompleteness that empowers the BSC's inscriptions and allows the process of interrogation and mediation to engage and unfold.

In summary, the BSC as a means of interrogation and mediation allows the coexistence of multiple rationalities within the same project. It does so because it operates between the presence of the sign, which creates boundaries and closure (by outlining the space of the possible), and the absence of meaning as referent of such a sign, which opens up the possibility of difference and a process of inquiry into what this meaning could be.

However, if this process of interrogation, knowledge ordering and invention never leads to a definite closure, how is it sustained? Why does it not lead to frustration and despair (to which the E&OS senior VP referred when using the metaphor of 'empty pockets'), and therefore to the abandonment of the BSC as an organizational working practice? We address answer this question

in the following section, in which we explore a further feature of the BSC as a motivating ritual that is sustained by instilling hope and belief in the users.

How the BSC performs measurement systems: the BSC as motivating ritual

Within the architecture of the new management systems in MEGOC, the BSC established a link between mission and corporate strategic imperatives on the one hand, and budgets, resource allocation and initiatives on the other. The adoption of the BSC and its functioning also generated a cyclical path of recurring training, meeting and review sessions, as illustrated in Figure 3. These sessions were: annual BSC *measures awareness* training sessions (see Figure 3, step a); monthly BSC team review sessions (step b); quarterly BSC–Budget *integrated* review sessions (step c); and annual *performance appraisal* and personal development sessions (step d). Moreover, as illustrated in the previous sections, a number of non-recurrent components of the new management systems architecture, such as individual BSC *measures builder* sessions on SAP (see Figure 3, step e) and the *business café* (step f), all played a role within the cyclical path generated by the use of the BSC.

[insert Figure 3 about here]

An interesting example of how the BSC was used as part of the new MEGOC management system is offered by the Producing Engineering Department (PED), where the BSC was strongly linked to an internal initiative referred to as ‘*Balanced Scorecard - Passport to the future*’. Within this initiative employees were encouraged to take part in a series of recurrent activities, which were allotted to a range of possible points and that were aimed at developing a better future through the achievement of higher levels of strategy-led company innovation. Among other activities, points were granted for engaging in the following: completing a linkage chart that connected individual activities to corporate strategy and for posting it on the office wall; creating a personal scorecard connected to the Division BSC; discussing the strategy with supervisors; participating in innovation workshops and developing innovative ideas; developing ‘third person teaching’, that is, teaching coworkers about what has been learnt from training and workshop sessions after returning to the office.

Similarly, with the intention of offering a further example of the way in which BSC-driven meetings offered a proactive space for engagement within the MEGOC management system, we now illustrate what we observed in one of the BSC's measure awareness sessions (step a in Figure 3). The purpose is to highlight how recurrent and non-recurrent meetings and sessions that define the architecture of MEGOC's management systems offered participants an opportunity to maintain, discuss, question, and transform measures, targets and initiatives during their continuous effort (and desire) to 'add value' to the company.

A senior manager in the E&OS Division, right before the beginning of one of these training sessions, stated: "there are several ways our people can contribute to value creation and, therefore, various possible ways to add value within the boundaries of corporate and divisional strategic imperatives". Pointing to a chart positioned on the training room wall, the E&OS senior manager continued by illustrating to one of the researchers what he believed was the core part of the E&OS BSC (see Figure 4):

As you can see, our key goal is to focus on customers' needs. [...]. Like a good strategy for a winning soccer club, our strategy map is strong up the middle: goalie – midfielder – centre forward. Therefore, we have these eight objectives [again, pointing to the chart] locked within cause and effect relationships with the aim of improving productivity and achieving 'best-in-class' performance. Then, there are eight more supporting objectives for achieving increased revenue growth, for protecting the oil market, for optimizing the corporate portfolio, and for supporting the national economy [...]. Later this afternoon, I will let them [employees attending a training session] think about initiatives to be implemented for achieving the corporate strategic imperatives, and talk about the measures that should be monitored along the way.

[Insert Figure 4 about here]

That afternoon, when the employees attending the training session were asked to think about the initiatives to be implemented in order to achieve the corporate strategic imperatives and to talk about the measures to be monitored along the way, a senior manager took the lead and asked to present and share with the class what he felt were the measures that needed to be kept under

control in order to monitor the ability of his department to add value to MEGOC. He used his laptop to make changes to the workshop leader's slide, and added a number of key performance indicators to the slide he was presenting:

If all of us agree that it is time to build a new house, we need to make sure that the foundations are solid. So we need to monitor whether our people live by the company's values and, most importantly, we need to motivate knowledge [see point 1, figure 4] sharing across boundaries to prepare our leaders in a cross-disciplinary manner [...]. Better levels of integration will help us optimize our processes in which Fleet Utilization and Inventory Turnover [point 2] shall be constantly analysed. ... If we all believe that internal and external customers are king, metrics such as on-time delivery, meeting with customers [point 3] and on-time project completion [point 4] are essential for driving our monthly and quarterly reviews. If we do these things, I am sure we will be financially rewarded and cash will return to our pockets no matter what.

A lively discussion followed this presentation with a number of participants, from other divisions as well, comparing their thoughts. Among others, a senior management accountant from the Finance Division, working temporarily on a project within E&OS, emphasized the need to include a number of financial and budget driven metrics. He used the computer on the podium to make direct revisions to the Power Point slides. He amended the previous map, and added his own measures in capital letters (see Figure 4):

Maybe it is because I am a finance guy, but my feeling is that we cannot add value to the company unless we keep the financial metrics under control throughout the map [...]. Whether we talk about the percentage of net direct expenditures for supporting knowledge sharing initiatives in the Learning and Growth perspective [see point 5, figure 4] or project cost performance [point 6] for optimising processes in the Internal Business Process perspective, we must stop from time to time and check whether our journey to achieve the corporate imperatives is financially on track [...]. If we really want to improve our financial productivity, we cannot forget to keep an eye on budget implications all the way

through the four perspectives and make sure we display both capital and operational cost avoidance and savings in the Financial perspective [point 7].

Theorizing the fourth feature of the BSC as rhetorical machine: a motivating ritual

In the examples mentioned above, MEGOC's management system and the BSC both construct the architecture of a space in which to perform in a ritualistic fashion.¹⁵ The BSC can be seen as a space that becomes recurrently experienced in the process of building strategy maps, defining KPIs, and perspectives (see the steps (a) to (e) in Figure 3).

Portrayed as a "passport for the future", the BSC and the paths it provides for MEGOC managers to take, resemble believers' experiences when searching for a vision of God in a path towards salvation. In rhetoric, this was called *ductus*, that is, a path, and was punctuated by certain spaces where specific activities of image composition needed to be made if a vision of truth was to emerge (Carruthers, 1990). The rationale for the BSC's adoption and use, its validity and theory as a vision of strategy, and as truthful and logical narrative that can prompt organizational action, therefore, is neither found in its allegedly representational ability, nor in the necessarily abstract and general rationales prescribed by Kaplan and Norton in their various works (1992; 1996). Rather, the rationale is mobilised, in practice, by this inscription, namely, in the performance and ritual that it calls for, and in the effects and actions that it produces when practiced. The nature of management practices and the reasons for their adoption, therefore, are not (or not only) in a supposedly stable 'text' which functionally satisfies certain organisational or social demands, but in the variety of performances that the practice allows through its nature of visual performable space, method of ordering and innovation and means of interrogation.¹⁶

¹⁵ By ritual we mean a sequence of activities establishing a relationship between objects, spaces, images, words, and texts resulting in a continuous enactment of knowledge and beliefs.

¹⁶ This form of constructing strategic knowledge and organizational actions should not be confused with fixed 'rules' or 'rational logics'. Considering that the rhetorical craft of constructing knowledge (Carruthers, 1990) was to be adapted to different situations, to the different intentions for which the practice was performed, similarly the BSC changes nature and rationale depending on the problems that it is pragmatically called to address (see Hansen and Mouritsen 2005).

The examples in Figure 4 are illustrative of this point. Here the chosen KPIs are never the ultimate ones, and the perfect PMS is impossible to design due to the work of composing the strategy map, which constantly allows further research and definitions as participants in the journey continue to earn points and build their passport to the future.¹⁷ It is only because of the incompleteness of strategy and KPI definitions that mediation between distinct MEGOC functions and divisions can happen and, therefore, there is hope for MEGOC managers to find (and ‘figure out’, in the sense of modifying the visual shape of the strategy map, for example) a workable compromise. These definitional gaps always offer a possibility for other definitions to emerge or to coexist with the current definitions (a good illustration of this point is the HR and IT managers’ views, as opposed to, for example, the Finance managers’ perspectives).

Hence, both the possibility of and the hope for mediation are evident. It is the role of the BSC as rhetorical machine, which allows reconfigurations while maintaining visual unity, making this process possible and thus providing hope to organizational actors. These actors are now given an instrument in which they believe that solutions can always be found to the definitional, organizational and political problems of identifying BSC perspectives, objectives and related KPIs.

The practice that we have illustrated above is the fourth feature of the BSC as rhetorical machine, namely its *nature of motivating ritual*, that is, a visual representation that should be interpreted as a recurrent performance and not as a substantive reference to a supposedly existent external referent such as, for example, faith in a given and stable strategic imperative (see point 4 in Figure 2). This reference to rituals (or even to the inscription as process, a term whose etymological origin discloses a religious link with a ‘procession’) is suggested by our observation and interpretation of three findings of the case study: namely, the way in which the employees of MEGOC constructed and enacted the space offered by MEGOC’s management system (see Figure 3); the BSC’s strategy map (see Figure 4); and the implementation of the BSC as a ‘passport to the future’.

¹⁷ The figures appear static because the field study is concluded.

6. Conclusions and implications for further research

This paper has combined insights from the literature on accounting inscriptions and on rhetoric with empirical material from a case study of BSC adoption and use in a large corporation, to explore the power of the BSC as visual diagram beyond a simple representational functionality. This has also allowed us to explain the multiple functions that the BSC carries out within organizations, as identified by the relevant literature, and further explore its features as inscription, illustrating how it engages and unfolds while remaining a stable practice within an organization.

Building on the case analysis, and on the insights offered by the literature review, we have constructed an analytical theoretical framework that defines the BSC as a rhetorical machine composed of four key features as summarized in Figure 2. Viewing the BSC as a *visual performable space* has allowed us to explain the ways in which the BSC offers users a space where they can perform strategy composition and construct logical narratives amongst strategic imperatives, objectives, and KPIs. However, while illustrating how the BSC's visualizations are not primarily concerned with representation but are important due to the work of strategy composition that they prompt (see Chapman 2005; Chua 2007), we have also illustrated how this process never leads to complete, shared understandings of strategic imperatives, objectives, and KPIs. Instead, this process allows the BSC to evolve depending on the contingent strategic concerns it helps to pragmatically address by establishing a relationship between performance measures and strategizing practices (see Hansen and Mouritsen 2005; Jørgensen and Messner 2010).

These considerations led us to further conceptualize the BSC as a *method of ordering and innovation*, that is, a visualization that provides users with guidelines for establishing new logical paths amongst abstract strategic concepts, providing methods that show how to establish these links without identifying a priori what such links should be. We then illustrated how the BSC is able to accommodate different users' interests within its unitary working practice by being a *means of interrogation and mediation*, that is, an instrument that constructs knowledge by allowing users to continuously question notions of strategic imperatives, objectives, and KPIs.

Thus, this process of interrogation opens the possibility for further knowledge construction and mediation between different interests, and allows the continuous unfolding of the functionalities of the BSC. Finally, in order to explain how this process is sustained over time and is thus recursively practiced, we then illustrated how the BSC also constitutes a *motivating ritual*, that is, a recurrent path of actions that aids the construction and sustainment of beliefs with the possibility of figuring out the right performance measurement system without, however, fulfilling this promise.

Furthermore, this paper makes two distinct contributions to the literature. Firstly, through the evidence collected from the case study, the theoretical framework developed in the paper enables us to explore the power of specific visual images such as hierarchical trees, wheels, and strategy maps, which all constitute key elements of the BSC as PMS. Building on research that has highlighted how PMSs are intrinsically incomplete systems of representations (Wouters and Wilderom 2008), we illustrated how the BSC engages users for the organizing work that it generates around this incompleteness, rather than for its ability to link financial and non-financial performance measures to strategy implementation, to increase performance, and to improve strategic decision making (cf. Kaplan and Norton 1992; 1996). Expanding the findings by Carruthers and Espeland (1991), Chua (1995), Thompson, (1998) and Quattrone (2009), who stressed the power of visualizations in favouring the adoption and sustained use of accounting, we have articulated the power of the BSC and other accounting visualizations into a theoretical framework that views the utility of accounting and performance measures more as actions rather than as merely simple and stable representations.

The BSC is, therefore, not an inscription in the sense of a simple and stable trace left on a piece of paper, a document, or on a computer screen. Rather, we may say that the BSC constitutes an 'ecology of signs', that is, a system of visual representations which is intrinsically a narrative (cf. Czarniawska 1998) because it enables users to build a plot through such signs (i.e., a series of visual representations which connect elements of strategy, organizational actors and other management practices such as budgeting, costing systems, SAP and the like). It is a plot, however, that is in a continuous state of flux because of the incompleteness of each of the visual

representations on which it draws. This incompleteness, as illustrated through the case material (see the example of the ‘measure builder’ session in Section 5), leaves room for the re-invention of objectives and measures. It is because of the function of the BSC as a rhetorical wheel that such an inscription can be at the same time a stable sign (i.e., the immutable visual design of the wheel), and a series of “transformations through which an entity becomes materialised” (Latour 1999, p. 306) into this stable sign (i.e., the continuous reorganisation of the contents of the wheel, which itself keeps looking the same). Articulating the visual power of accounting inscriptions by studying the BSC’s use has, therefore, allowed us to complement previous work that, implicitly or explicitly, have paid attention to the features of the BSC and PMSs as visual objects in generating enabling effects and in developing managers’ calculative ability (Lipe and Salterio 2000; 2002; Cardinaels 2008; Cardinaels and van Veen-Dirks 2010; Qu and Cooper 2011).

Secondly, the paper contributes to the understanding of how the BSC, as visual inscription (Qu and Cooper 2011), enables the process of generating new rationales for its use beyond those which were intended by its proponents (e.g., Kaplan and Norton 1992). We argue that the four features of the framework developed in this paper allow us to view the BSC as a rhetorical machine that helps to manage and accommodate, within the same organizational practice, the challenges and negotiations that it is constantly subject to, due to organizational politics and the diversity of viewpoints that are generated by the incompleteness of PMSs (see Wouters and Wilderom, 2008 p. 491). In this sense, the BSC does not provide definitions of performance but only visualizations that act as ways (as approaches, paths, modes) of performing these possible definitions. What is shared amongst MEGOC’s users is not the meaning conveyed by the BSC but a visual and schematic way of doing things. This is what distinguishes a grouping of signs from an ‘ecology of signs’ that coherently works as a rhetorical machine.

The content and the contributions that characterize this paper call for further investigation in two related areas of research. Firstly, further research is needed to explore the role of accounting visualizations in the construction, rather than representation, of financial realities and rationalities. There is a tendency to use rhetorical machines (e.g. hierarchical tree, the wheel of the BSC) without fully appreciating what they enable us to do. One is inclined to believe they do not

have a role in how one thinks, organizes organizational realities and, finally, whether one decides to adopt a technique or not. These machines instead influence the content and the mode of presentation of a given concept (Bolzoni 1995, p. 29). We believe that the missing link between forgotten rhetorical practices and contemporary PMSs such as the BSC is worth exploring, since this helps explain why a technique, whose economic benefits are doubtful, is so widely adopted.

Secondly, our findings call for researching shared forms of understanding that visual diagrams presuppose (see Chua and Boedker, forthcoming). This implies the study of what we label here as 'schematic rationality', namely how organizational and social behaviour is informed by the visual schema utilised in defining what counts as a 'good' performance. Therefore, our findings call for a better understanding of the power of inscriptions in the context of the adoption and use of PMSs, recognising the existence of a new kind of narrative genre that is based, not only on texts, but also on images and how these affect users. We thus call for a full exploitation of Fabbri's 'semiotic turn' (1998).

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TABLE 1

Schedule of interviews (2003-2005 and 2008)

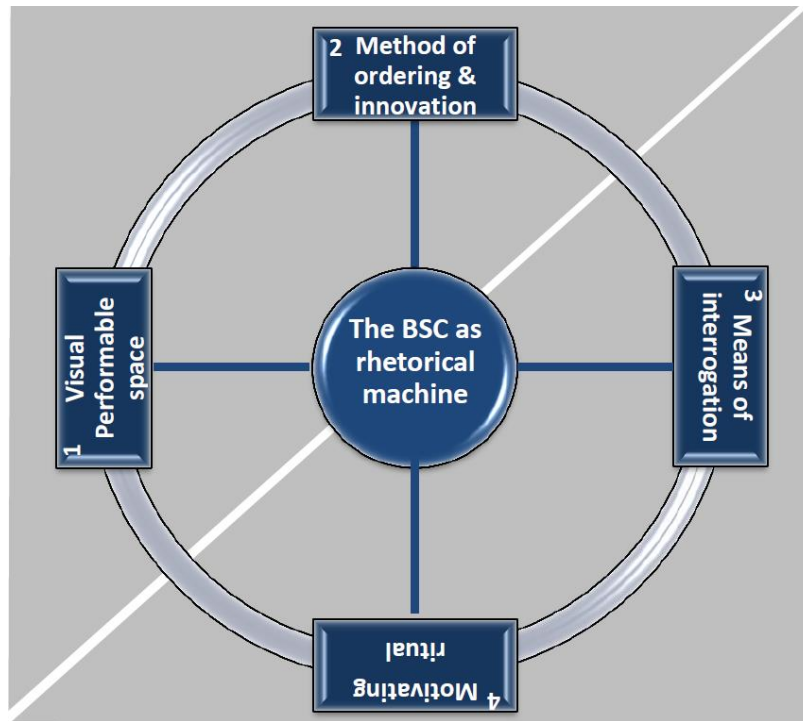
	Interviewee	MEGOC Divisions / Departments (in alphabetic order)	Number of Interviews	Duration of Interviews (approx.)
1	Manager	Corporate planning	3	2h; 1h; 1h40m
2	Senior Manager	Corporate planning	2	2h; 1h
3	Senior Engineer	Engineering & Operations Services	2	1h40m;2h
4	BSC team leader	Engineering & Operations Services	3	2h; 1h; 1h40m
5	BSC team member A	Engineering & Operations Services	2	2h; 1h
6	BSC team member B	Engineering & Operations Services	2	2h; 1h30m
7	Senior Manager	Engineering & Operations Services	2	2h15m; 1h20m
8	Cost Engineer	Engineering & Operations Services	1	1h30m
9	Senior Accountant	Finance	2	2h; 1h30m
10	Senior Mgt. Accountant	Finance	2	2h; 1h40m
11	Manager	Finance	2	2h; 1h20m
12	Management Accountant	Finance	1	1h
13	Training Manager	Finance	2	1h; 2h
14	Cost controller	Finance	1	1h30m
15	Manager A	Human Resources	2	2h; 1h30m
16	Manager B	Human Resources	2	2h; 1h10m
17	Manager A	Industrial Relations	2	2h; 1h
18	Manager B	Industrial Relations	1	1h30m
19	BSC team member	Industrial Relations	2	2h; 1h30m
20	Senior Manager	Information Technology	3	2h; 1h; 1h40m
21	Manager A	Information Technology	2	2h; 1h30m
22	Manager B	Information Technology	1	1h45m
23	Internal consultant A	Internal Consulting Department	2	1h20m; 1h30m
24	Internal consultant B	Internal Consulting Department	1	1h40m
25	Engineer	Producing Engineering Dept.	1	1h30m
26	BSC Coordinator	Producing Engineering Dept.	2	2h; 1h30m
27	BSC team member	Producing Engineering Dept.	1	1h30m

Figure 1 The Balanced Scorecard as a performable space



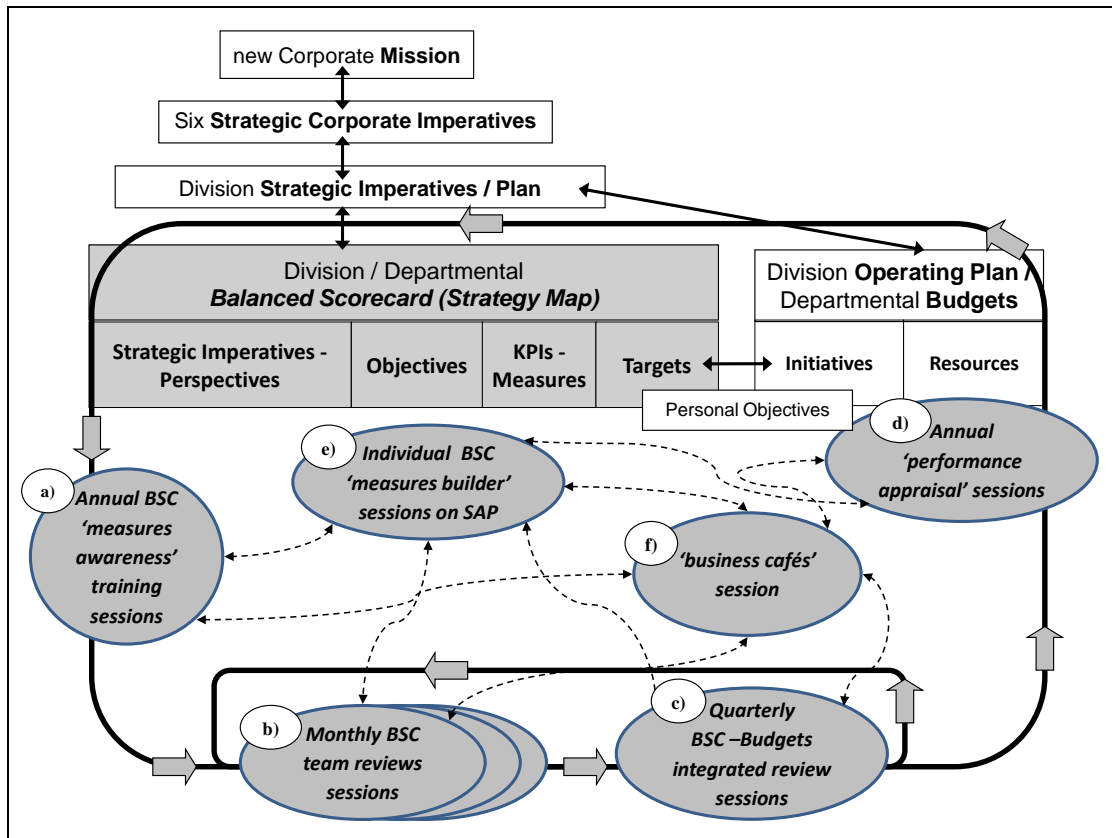
Source: Company materials (adapted for printing)

Figure 2 Articulating the power of inscriptions: The Balanced Scorecard as rhetorical machine



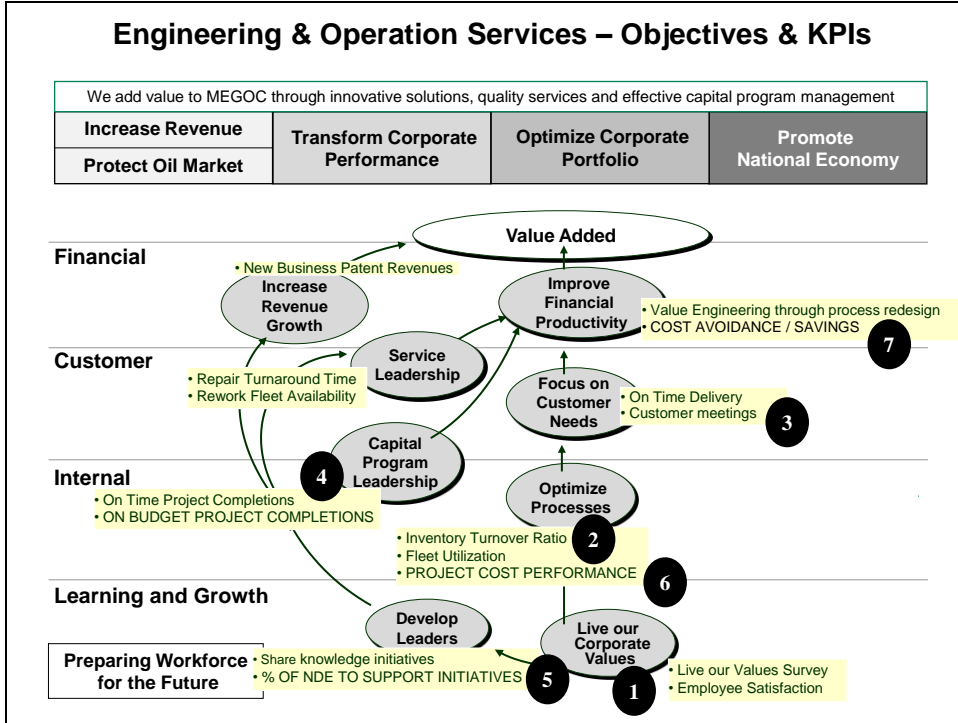
Source: Authors' elaboration

Figure 3 The BSC ritual within MEGOC's management system



Source: Authors' elaboration from field material

Figure 4 Performing the BSC ritual



Source: Company materials (adapted for printing)