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# How fair value is both market-based and entity-specific: The irreducibility of value constellations to market prices

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## ABSTRACT

The objective of this paper is to problematise the fundamental assumption, shared by standard-setters and extant literature, and one that is taken-for-granted in the recent debate on accounting financialisation, that “fair value is a market-based measurement, not an entity-specific measurement” (IFRS 13.2). The paper shows how it is both. This is done by stepping outside the conventional disciplinary resources of accounting – economics and finance – and mobilising an alternative value framework: Ferdinand de Saussure’s semiology. Semiology’s value is a two-dimensional constellation, i.e. a relational product of other values in the system (the market) and in the statement (the firm). With this framework, the paper analyses measurement practices prescribed by IASB’s guidance to explicate its underlying implicit concepts as distinct from those formally proclaimed in IASB’s recent Conceptual Framework Exposure Draft (*CFED*). Such analysis leads to two main insights. First, the entity-specific perspective is reframed as sensitivity to interrelations between value-bearers in the statement, thus avoiding the frequently assumed though contestable dichotomy between present objective facts (market) and subjective estimation of the future (entity-specific). Second, fair value measurement is shown to incorporate – in a manner that is inherent to the standard-setter’s own perspective and not merely as a matter of imperfect implementation – both market-based and entity-specific dimensions. IASB’s measurement practices are more in line with semiology’s framework of two complementary inputs (the market *and* the entity), than with the *CFED*’s two dichotomous outputs (fair value *or* value-in-use), and the market/entity contrast is thus conceptually fractured.

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## 1. Introduction

The emergence of Fair Value (*FV*) as the predominant measurement concept in international accounting has been related to a broader social, economic and political shift towards the market paradigm in and beyond economic spheres (Chiapello, 2015; Müller, 2014; Power, 2012). *FV* has been conceived as a manifestation of a vision “of the market as the ultimate ‘auditor’ of asset and liability values” (Power, 2010, p. 198). This ‘financialisation’ or ‘marketisation’ in accounting (Georgiou, 2015; Mennicken & Millo, 2017; Zhang & Andrew, 2014) is most clearly and decisively reflected in the opening statements of IFRS 13 *Fair Value Measurement* (IASB, 2011, para. 2): “Fair value is a market-based measurement, not an entity-specific measurement”. The aim of this paper is to show how *FV* is both market-based *and* entity-specific, and thus to problematise a fundamental and consequential assumption, which

is not only unequivocally proclaimed by the standard-setter but is also taken-for-granted in extant literature – from both the traditional and critical ends of the research spectrum. The paper will offer and substantiate a reversal of the assumed typology of current measurement bases, by illustrating how market-based measurement and entity-specific measurement are not contradictory homogeneous (or one-dimensional) value outputs – *FV* on the one hand and Value-in-Use (*VIU*) on the other – but rather complementary inputs constituting a heterogeneous (or two-dimensional) value. Ultimately, the paper aims to fundamentally fracture the market/entity dichotomy, and to do so not from the perspective of those implementing accounting standards, but rather from the standard-setter’s own perspective.

Recent studies have started to shed new light on the fragility of the market/entity dichotomy in the context of contemporary financial accounting practices. The study by Barker and Schulte (2017) shows how in certain cases of non-financial assets, the proclaimed market-perspective of *FV* cannot be fully implemented

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by preparers, who find it necessary to apply entity-specific assumptions. Preparers have difficulties even in clearly distinguishing the market perspective from the entity-specific perspective. The preparers' practices in applying IFRS 13 were found to be expedient, unstable and ultimately in contradiction with the market perspective proclaimed by the standard and "at odds with the fair value idea that is wished-for in IFRS 13" (p. 56). Similarly, but with a focus on the users of financial statements, Georgiou (2017) illustrates how investors and analysts are cautious about market-priced valuation, and in fact are involved in different evaluations of *FV* figures, taking into account the entity-specific manner in which the business has performed, in 'dissonance' (Stark, 2009) with the way that *FV* is portrayed by the standard-setter. The study by Huikku, Mouritsen, and Silvola (2017) challenges the market/entity dichotomy from the opposite direction: when an entity-specific perspective is to be applied, in the context of impairment under IAS 36 (IASB, 2004), those involved in the production of financial statements cannot avoid 'looking elsewhere' to markets and other benchmarks. The calculation of goodwill impairment has been "much more average than it would be expected given the promises of IFRS" (p. 78). The boundary between market and entity-specific measurements is thus blurred from both directions (and see also Mennicken & Power, 2015; Mennicken & Millo, 2017).

This increased attention to the heterogeneous nature of the accounting value has a distinct focus on the users of accounting standards – statement preparers, auditors and investors. Emphasis is now being put on the gaps, discrepancies or 'translations' between the accounting standards issued by standard-setters and the actual practices of those involved in their implementation (Huikku et al., 2017, p. 69; see also; Cooper & Robson, 2006). The focus on the messy "rhythms of production: from places where standards are written to places where standards are interpreted, translated and applied to produce accounts" (Robson, Young, & Power, 2017, p. 37) is producing enhanced and more realistic understanding of the complexities of accounting valuation. Such a focus on the practitioner's perspective is amenable to a sociological investigation, and indeed this strand of research is frequently inspired by the sociology of worth (Boltanski & Thévenot, 2006; Stark, 2009) or 'valuation studies' (e.g., Helgesson & Muniesa, 2013; Kornberger, Justesen, Madsen, & Mouritsen, 2015; Antal, Hutter, & Stark, 2015; and see; Mennicken & Sjögren, 2015).

However, with such a focus, the standard-setter's perspective remains relatively under-explored. Furthermore, the implicit assumption with such a focus on preparers and users, is that the *FV* standards themselves are coherent and consistent: the dissonance is assumed to be generated between the seemingly homogeneous prescribed standards and their complex implementation in realistic settings (Georgiou, 2017). The paper aims to take a step forward in filling this gap – in investigating the earlier stage in the production of *FV* entries in financial statements, namely the standard-setter's prescriptions as to asset valuation. It questions the assumed coherence in IASB's theorisation of *FV* as exclusively market-based, and points to the discrepancies and gaps from within the standard-setter's own realm.

In order to do so, the paper takes a dual research strategy. First, it mobilises a theoretical framework which has at its very core the conceptualisation of values in statements: Ferdinand de Saussure's semiology. Second, it studies the gap between the standard-setter's formally proclaimed concepts and narrative, and its actual prescriptions for valuation practices with their nuanced 'nuts and bolts' (Vargha, 2016). Put differently, the paper proposes to "move from, on the one hand, the IASB's rationalization of what it asserts it should be trying to do to, on the other hand, what the IASB is actually doing" (Barker & McGeachin, 2015, pp. 183–4). Such a dual strategy will allow, as shown below, a fundamental

problematisation of the characterisation of *FV* as exclusively market-based and of the related market/entity divide. It will allow to offer a new dimension in the critique of *FV*, different from traditional accounting literature – with its focus on the scope of applicability of *FV* rather than its characterisation, and different from the organisational accounting literature – with its focus on statement preparers and users implementing accounting standards rather than the conceptual underpinnings of statement construction as derived from the standard-setter's own prescriptions.

The trigger and background for this paper's investigation is an important policy-making event: the publication of IASB's Conceptual Framework Exposure Draft (IASB, 2015; hereafter *CFED*), which, for the first time, addresses systematically the cardinal issue of measurement. The *CFED* formalises the dichotomous typology of IASB's current measurement regime, where purely market-based *FV* is contrasted with purely entity-specific *VIU*, and the nature of *FV* is therefore fully financialised. The next section introduces the new and the old in the *CFED*'s principles of current value measurement, and portrays extant literature on the limits of the market paradigm in *FV* measurement. The third section introduces semiology as a value framework which may serve as an alternative to the *CFED*'s value framework, and the fourth section describes the paper's research design strategy. The fifth section proposes, through an analysis of IASB's prescriptions and a discussion of their implications, a reframing of the dividing line between entity-specific and market-based measurements. This reframing serves as a preliminary step to the ultimate task of this paper, covered in the analysis and discussion of the sixth section, to explicate and theorise the co-existence of market-based and entity-specific perspectives in *FV* and to consider its implications. The last section provides conclusions and limitations, and uses the proposed theorisation of *FV* to offer further implications in the broader studies of valuation, beyond the realm of IASB's measurement regime.

## 2. The extant literature and the *CFED*: the limits of the debate on the limits of *FV*

### 2.1. *CFED*: maintaining the market perspective of *FV*; proposing criteria for its scope

For decades, IASB<sup>1</sup> and FASB have been reluctant to address in their conceptual frameworks the issue of measurement beyond merely listing the various measurement bases used in different standards (Hines, 1991; Whittington, 2008, 2015a; Zijl & Whittington, 2006). It has been argued, that the "lack of concepts relating to measurement is a glaring hole in the Framework" (Barth, 2014, p. 332). The IASB's recent conceptual framework project is the first to address in a more systematic manner the issue of measurement, which is "one of the most controversial and sensitive issues in accounting" (Hoogervorst, 2015). It is therefore an important step in global accounting policy-making. Even if one is suspicious of conceptual framework projects in terms of their usefulness or impact, the publication of the *CFED* may at least serve as a trigger to re-engage taken-for-granted assumptions (Robson & Young, 2009) in the operation of what is considered to be "perhaps the most powerful system of representation of social and economic life that exists today" (Miller & Power, 2013, p. 563). This paper uses this trigger to challenge one specific prevalent assumption: the characterisation of *FV* as a purely market measurement.

The *CFED* offers no paradigmatic shifts with respect to the overarching principles of the IASB's measurement regime. It codifies the 'calculative pragmatism' (Power, 2010) of a mixed

<sup>1</sup> And its predecessor, the International Accounting Standards Committee (IASC).

measurement approach, and structures the familiar dichotomy between two measurement branches: Historical Cost (*HC*) and current value, while the latter is further split between *FV* and *VIU*. There are also no changes in terms of the characterisation of *FV*. It is defined, as in IFRS 13 (para. 9), as the price that would be received to sell an asset in an orderly transaction between market participants (*CFED*, 6.21). *VIU* is defined as the present value of cash flows that an entity expects to derive from the continuing use of an asset and from its ultimate disposal (para. 6.34), which is generally in line with the definition in IAS 36 (para. 6). Within current value measurement, *FV* is the dominant approach while *VIU* is an exception that at present applies only to impairment (para. BC6.26).

The *CFED* formalises the fundamental dividing line between *FV* and *VIU*, where the former is exclusively market value, and the latter is exclusively entity-specific value. In fact, under the *CFED*, *FV* and *VIU* are shown to be almost identical: “In principle, value in use ... reflect[s] the same factors as described for fair value”, except that *VIU* is “based on entity-specific assumptions instead of assumptions by market participants” (para. 6.35). The exclusivity of the market perspective in *FV* was assumed well before the publication of IFRS 13 in 2011. The introduction of *FV* measurement in various IASB standards during the early 2000s has been deemed to enhance the objectives and characteristics of financial reporting, with the increased preference to ‘decision-usefulness’ and ‘relevance’ over ‘stewardship’ and (the older version of) ‘reliability’ (e.g., Bougen & Young, 2012; Miller & Power, 2013; Power, 2010, 2012; Young, 2006). The *CFED* seems therefore to merely formalise what has already been taken for granted for two decades: *FV* is the ultimate manifestation of marketisation of financial accounting values (see Müller, 2014; Zhang & Andrew, 2014).

There is nevertheless one new aspect in this regard in the *CFED*, which relates to the scope of applicability of *FV*. The *CFED* provides for the first time the selection criteria according to which a specific measurement basis should be chosen. These criteria are based primarily on the qualitative characteristics of relevance and faithful representation (*CFED*, 6.48–6.52). In assessing relevance, the *CFED* requires to take into consideration two types of factors: one is the characteristics of the asset, and the other is “how that asset or liability contributes to the future cash flow. This will depend in part on the nature of the business activities conducted by the entity” (para. 6.54(a)). In this regard, the impact of other assets on the contribution of the measured asset to the firm is of significance:

For example, if a property is realised by sale, it will produce cash flows from that sale, but if a property is used in combination with other assets to produce goods and services, it will help produce cash flows from the sale of those goods and services (*CFED*, 6.54(a)).

The *CFED*'s second selection criterion is faithful representation, again with an emphasis on the interrelations between the firm's items:

When assets and liabilities are related in some way, using different measurement bases for those assets and liabilities can create a measurement inconsistency (an ‘accounting mismatch’). Measurement inconsistencies can result in financial statements that do not faithfully represent the entity's financial position and financial performance (*CFED*, 6.58).

These two criteria require a broader view when selecting a measurement basis. To the characteristics of the asset on a stand-alone basis, one must add an entity-specific perspective that embeds the positioning of the asset in relation to the firm's other

assets and liabilities. In this, the *CFED* implicitly adopts what was explicitly introduced a few years earlier in IFRS 9 (*IASB*, 2014) in the limited context of financial instruments – the *CFED* generalises a business-model selection mechanism.

In the Basis for Conclusion (BCIN.31) the IASB explains that the term ‘business-model’ has not been used in the *CFED*, in light of the various meanings that are associated with this term by different organisations. However, the support for its underlying principle is clear: “financial statements can be made more relevant if the IASB considers ... how an entity conducts its business activities” (*IASB*, 2013, para. 9.32). Further, “the IASB should consider how an asset contributes to future cash flows ... when deciding on an appropriate measurement method” (para. 9.33). Both the asset's own characteristics and its relation with the firm's other items must be taken into consideration when determining the appropriate measurement basis (see a similar approach in *EFRAG*, 2013). They both determine the scope of applicability of *FV*.

## 2.2. The focus of the *FV* debate in current literature: the scope of *FV* and the *FV*-*HC* dichotomy

Notwithstanding the generally increasing attractiveness of *FV* in policy and academic discourse, certain aspects of its limits have also been discussed. The decisive issue in the IFRS *FV* debate, as depicted in Whittington's recent reviews (2015a,b), has been the extent to which the particular market is efficient. *FV* is frequently considered the best measurement basis “in the context of deep and liquid markets (the hallmark of the fair value view)” (Whittington, 2015b, p. 230); in other conditions – *FV* becomes more suspicious and the safe harbour of *HC* becomes necessary. The explicit or implicit critique of *FV* has focused on its appropriate scope of applicability, primarily as a derivative of market conditions (Alexander, 2007; Hague, 2007; Whittington, 2008). The concern with *FV* is therefore framed not as a conceptual issue, but rather as one of implementation:

In short, fair value accounting is a plus, implementation issues aside. However, historical cost accounting has features that provide an alternative should ideal fair value accounting not be attainable (Penman, 2007, p. 37).

In the same vein Whittington (2015a) summarised:

[*FV*] assumes that markets are efficient and sufficiently complete, deep and liquid to enable exit prices to be reliably measured or estimated. It also ignores transaction costs in measuring *FV*. Thus, the basis of *FV* thinking is a particular market setting that is an idealized version of that which exists even in advanced economies such as the US (p. 561).

This type of critique of *FV* with the resulting *FV*-*HC* trade-off has taken an even stronger hold during and after the great financial crisis, as “The ‘deep and liquid markets’ that had previously been seen to justify fair value measurement, particularly for financial instruments, had demonstrated an alarming degree of vulnerability” (Whittington, 2015b, p. 231; see also in; Laux & Leuz, 2009; Müller, 2014; Whittington, 2015a).

A similar focus on the scope of applicability of *FV* is also evident in several recent proposals for mixed measurement selection criteria. Such proposals assume a different limitation in the applicability of *FV* (different from the focus on market conditions): even in perfect markets, *FV* may not be appropriate in measuring an item if its contribution to the firm is a product of interrelation with other items. Three such proposals for measurement typologies have been

offered by Linsmeier (2016), Marshall and Lennard (2016), and Nishikawa, Kamiya, and Kawanishi (2016). In each of these proposals, factors such as transferability, business model, and convertibility to cash determine whether the measurement basis should be *FV* or *HC*.<sup>2</sup> In each proposal, the sensitivity of the measurement to the asset's interrelation with other items in the particular firm plays an important role, even if only implicitly. A similar approach has been taken by Botosan and Huffman (2015), who return to the distinction between 'in-exchange assets' that should be measured at *FV*, and 'in-use assets', which contribute to the firm by being used in combination with other assets and should be measured at *HC*. Penman (2007) captures the essence of the critique of *FV* that is embedded in such proposals, by arguing that when the shareholder value is a product of a business plan and not mere fluctuations of markets, the minuses of *FV* "do add up" (p. 42). In the context of business operations that interrelate resources to produce added-value, the purely market-based *FV* is insufficient, and therefore the default option of *HC* is applicable. The structure and logic of these recent proposals are therefore largely in line with the *CFED*'s business-model measurement selection criteria described in section 2.1 above.

Another feature of these and previous proposals, which is also shared by the *CFED*, has been the exclusion of entity-specific measurement (*VIU*) in light of its association with subjectivity and the uncertainty underlying the estimation of future events. Common interpretations (e.g., Barth & Landsman, 1995; Barth, 2006; Hodder, Hopkins, & Schipper, 2013; Whittington, 2015b) have viewed the entity-specific measurement as categorically inferior to market-based *FV*. The entity-specific perspective is assumed to be based on estimations of the specific management, as opposed to market estimations; it is assumed to be based on private information, as opposed to public information; and it takes into consideration the management's future plans and intentions, and thus is not limited to existing factual circumstances. The seemingly inferior entity-specific *VIU* has therefore been assigned a restricted role, namely impairment tests.<sup>3</sup>

To summarise, the focus of the debate on *FV* and its limits has been on the scope of its applicability, resulting in measurement selection criteria that contrast *FV* with the traditionally dominant *HC* on the one hand, and with the marginalised entity-specific *VIU* on the other hand. With this structure, the nature of *FV* as a purely market-based value is assumed both by the IASB and the current literature. In order to question this fundamental assumption, this study employs a value framework that is located outside the conventional disciplinary resources of financial accounting research: semiology.

### 3. Theoretical framework: semiology's value constellation

As section 2 illustrates, the recent standard-setting-oriented literature has focused on the scope of applicability of *FV* rather than its characterisation, and, as section 1 illustrates, the recent organisational accounting literature has focused on the characterisation of *FV* from the preparers and investors' perspective (implementation) rather than that of the standard-setter. What remains absent is a critical investigation of the conceptual characterisation of *FV* from the standard-setter's own perspective. The paper proposes to fill this gap – to challenge the exclusive market

orientation of *FV* which is widely taken for granted by both strands of literature – and to do so through an interdisciplinary approach. In that, the study follows calls from the organisational accounting literature to pay more attention to the domain of financial reporting (Robson et al., 2017).

The following analysis will show that semiology – dually defined by Saussure as a theory of social sign systems and a theory of co-systemic values – may provide a new perspective in the investigation of the principles underlying financial accounting practices and in particular those of value measurement. Semiology theorises knowledge production in statements through the pivotal concept of value, the paradigmatic case being the value of a word in a sentence. As Roland Barthes (1994) summarises, Saussure's conceptual shift is captured in the move from the impasse of representational 'meanings' of words, to pragmatic relational 'values' of words. With this focus, semiology's potential to shed light also on the nature of values of numerical entries in *financial* statements – such as of assets or liabilities – is only intuitive. The following paragraphs substantiate this intuition.

Although his attention has been to the realm of language, Saussure – in his *Course in General Linguistics* (2011 [1916], hereafter the *Course*) and in his more recently published manuscripts (Saussure, 2006, hereafter the *Writings*) – had envisioned a broader framework that would be applicable to other social sign systems. These may include numerical sign systems: "language is merely a specific case of the theory of Signs ... Within the general theory of signs the specific case of vocal signs might not be incalculably more complex than all the specific known cases, such as writing, numerals, etc." (*Writings*, p. 154). The applicability of semiology in accounting is particularly meaningful in light of Saussure's focus on only *purposeful* social sign systems (*Writings*, p. 154; Barthes, 1968, p. 41): language statements in his case, and financial statements in ours. Indeed, post-Saussurean structuralism and post-structuralism have expanded the application of semiology to various realms in the social sciences, arts and humanities. These have usually been second-order sign systems that were linguistic at their fundamental level, such as in the cases of narrative, myth and rhetoric. The application of semiology to financial statements as proposed here is different in that regard, as it is not second-order of, or reducible to, language. *Accounting Semiology*, investigating the signifying operation of financial statements, would therefore stand in parity with *Linguistic Semiology* with its investigation of language statements (Hayoun, 2018).<sup>4</sup>

At semiology's core is the understanding that the value of a term in a statement – such as a word in a sentence or a numerical entry in a financial statement – is not a product of a natural or rational relation between an expression ('signifier') and a conceptual content ('signified'). It is not intrinsic, but rather the product of relations with other values. Semiological elements are a product of oppositions, differences, and generally: relations. These are non-material and non-substantive (*Course*, pp. 7, 10, 122; *Writings*, pp. 102, 136–7, 149), and therefore the terminology of 'value' is contrasted with (and provides a substitute to) that of 'meaning':

It must be accepted however that value expresses better than any other word the essence of this concept, which is also the essence of the language system (langue) itself, namely that a

<sup>4</sup> Saussure and Barthes' semiology has been mobilised in the accounting literature in the analysis of *textual* (narrative) parts of corporate reports or particular terminology used in accounting standards (e.g. Davison, 2008; Evans, 2004; Malsch & Gendron, 2009; Parker, 1994; Walton, 1993). Its use in conceptualising the *numerical* signs that comprise the core financial statements has been, on the other hand, rare and insufficient (see the current paper's reference to, and critique of, Tinker, 1991).

<sup>2</sup> Or current cost in the case of Marshall and Lennard (2016).

<sup>3</sup> The focus on the *FV-HC* dichotomy and the marginalisation of *VIU* have old roots. Littleton (1935), for example, views value-in-use as cost and value is only 'value-in-exchange' (pp. 270, 272). The category of current value which is not value-in-exchange does not exist.

form does not have meaning but has value: that is the crucial point. It has value, hence it implies the existence of other values (*Writings*, p. 12).

Importantly, the semiological value is relational in two different axes: the associative and syntagmatic axes. In the associative axis, elements in the sign system are grouped (associated) into categories sharing a common feature. The differentiation principle is paramount in this axis, as the value of an element is firstly based on its similarity with and difference from other 'adjacent' elements (the word 'teacher' draws its value from its similarity with and difference from words such as 'professor' or 'tutor'). The syntagmatic axis focuses on the positioning of the element in the specific statement – on the co-presence of other elements in the statement (the 'syntagm'). The value of a word is impacted by its interrelation with other words in the particular sentence (see illustration in section 5.1.2). The semiological value is therefore defined as a product of relation with other values in the system, from which it is differentiated, and from other values in the statement, with which it is interrelated (*Writings*, p. 60). It is no more than “the center of constellation; it is the point of convergence of an indefinite number of co-ordinated terms” (*Course*, p. 126). It is the mere *assemblage* of other terms 'around it', *in praesentia* – the syntagmatic axis, and *in absentia* – the associative axis (Saussure, 1993, p. 136; Barthes, 1968, pp. 58–9; Joseph, 2012, p. 597).

Although the internal relation between a 'signifier' and a 'signified' is neither natural nor rational, meaning is not completely abandoned. It is rather acknowledged as untenable. In sign systems, there are both 'exchange' and 'comparison' (*Course*, pp. 115–116):

If we consider on one hand the exchangeable, and on the other the co-systematic terms, no relationship is perceptible. The role of value is to relate these two things. It relates them in a way which defeats the mind (*Writings*, p. 239).

The semiological value may therefore be portrayed as comprised of three axes: one of which is ideal (the meaning, signifier-signified relation), and two that are pragmatic (the associative and syntagmatic). The former can only be aimed at indirectly through the latter.

A central point here is that the pragmatic relationality of value to other values is two dimensional. The semiological value is not merely a product of the general system, but is rather situated in a particular statement. Previous semiology-inspired conceptualisations of value in accounting have tended to gloss over the latter of these two dimensions, which is crucial to an understanding of value as situated rather than abstract. This has been the case in Tinker's study (1991), in which he refers to Saussure to offer an alternative value framework in order to contrast it with an intrinsic-representational notion of value. It is, in this regard, similar to Thompson's theory of accounting calculation (1987), which he also substantiates by analogy to language. Each of these proposals offers a relational framework for value in accounting, but in a manner that overlooks a critical component: the syntagmatic situation. Their critique – value is relational rather than intrinsic – is valid but partial. Their relationality remains at the level of the system (the market): it remains one-dimensional.

Interestingly, both Saussure and Barthes briefly refer to monetary values as an illustration of the semiological value. Saussure gives the example of the in-comparison 'horizontal' relation between the Swiss Franc and the Dollar, which is different from the in-exchange 'vertical' relation between any of the currencies and a loaf of bread that can be bought with it (*Course*, p. 115). Similarly, Barthes (1994) makes the analogy to monetary currencies and gold.

Those believing in Hermeneutics, he argues, view the gold (the signified) as certifying the currency (the signifier). However, Barthes emphasises, “Saussure's little drama is that ... he trusts neither the Sign nor Gold”; for him “currencies would stand among themselves, without reference to a natural standard” (p. 154). These analogies illustrate the semiological shift from substantive meaning to relational value. However, in these brief examples, both Saussure and Barthes fail to fully follow their own principles, which require not only relationality, but – specifically and crucially – two-dimensional relationality, with the situatedness (syntagmatic axis) added to the classificatory system (associative axis). These examples cannot support the move from linguistic semiology to financial semiology. In currency-exchange transactions (Franc-Dollar) there is only the system (market), and no particular 'statement': the syntagmatic axis is missing from this unsatisfactory analogy. The following sections will show how financial semiology is, instead, manifested in financial accounting; how, in particular, the semiological value is manifested in accounting value; and how such a conceptualisation destabilises fundamental assumptions in the contemporary debate over fair value.

#### 4. Research design: exposing implicit concepts from prescribed practices

The first element in this paper's research strategy is the mobilisation of an interdisciplinary theoretical lens, as depicted in the previous section, which allows an unrestrained – *undisciplined* – questioning of the predominant view. Semiology's value framework stands in fundamental opposition to that of the *CFED*. While the latter is based on an output dichotomy between market-based *FV* and entity-specific *VIU*, the former depicts a value that is a product of complementary inputs: the associative relation that is based on the general system (e.g., market), and the syntagmatic relation that is based on the specific statement (depicting the specific entity).

The second element in this paper's research strategy is the focus on gaps, discrepancies and translations: not between standard-setters and those involved in standards implementation (Cooper & Robson, 2006; Huikka et al., 2017; Robson et al., 2017), but rather between the standard-setter's formally proclaimed concepts and the actual detailed measurement practices that it prescribes in its standards and other guidance. Barker and McGeachin (2015) have anchored their study of accounting conservatism on such gaps within the standard-setter: “By looking at the accounting practices required or proposed, we move from the abstract conceptualisation (and rejection) of conservatism in the Framework to the reality of defining principles and creating rules to be applied in practice” (p. 183). Paying attention to the translation between the standard-setter's proclaimed concepts, as in the *CFED*, and its prescribed measurement techniques is important, because it highlights the fragility and multiplicity within the realm of the standard-setter's own products. Such a research strategy provides a more nuanced insight into what would otherwise seem coherent. It has the potential of re-characterising the problematisation of conventional views from the ambit of imperfect implementation to that of the fundamental prescription. Specifically in this paper, such a strategy provides a more refined understanding of the IASB's seemingly homogeneous perspective – the market perspective – in *FV* measurement. This dual strategy of attending to the prescribed practices (Mennicken & Millo, 2017) while using a different 'conceptual instrument' (Robson, 1991) facilitates the objective of gaining insight to the *implicit*, rather than official, concepts underlying IASB's measurement regime (see also Barker, 2015).

The empirical core of this study comprises IASB standards and accompanying guidance documents such as bases for conclusions,

application guidance and illustrative examples (for the use of standards and modification to standards as empirical evidence, see [Barker & McGeachin, 2015](#); [Bougen & Young, 2012](#)). Specifically, the study focuses on those standards addressing the two sub-categories of current value measurement: *FV* and *VIU*. IFRS 13 offers valuation techniques which are applicable when other standards require or permit *FV* measurement (paras. 1, 5). IAS 36 outlines how to determine *VIU* as a measurement basis for the recoverable amount in the context of impairment testing (*CFED*, BC6.26). These two key standards, with their ancillary publications, were systematically analysed. Together, they provide a comprehensive account as to how – as opposed to when – current value of (financial and non-financial) assets should be measured according to IASB.

Two clarifications are of necessity. First, the object of enquiry in this study is the products, rather than the process, of standard-setting (see e.g. [Young & Williams, 2010](#)). The paper's concern is not with what is being argued about the nature of *FV* (in which case interviews with individual standard-setters or due-process documentation might have been relevant). Rather, it is about the nature of *FV* as it is reflected in the actual practices prescribed in the IASB's guidance that is advanced for the use of preparers and auditors of financial statements.

Second, while the argument being made is with respect to the characteristics of the *numerical* values of assets in the statement of financial position, this is done through the investigation of *textual* material, namely the various publications of IASB relating to the manner in which *FV* should be measured by statement preparers. The analysis of such textual documents is not conducted through any formalistic interpretative method, such as quantitative or qualitative content analysis or a semiotic (or hermeneutic) analysis. Semiology is used here not as a method to analyse text, but rather as a theoretical framework to conceptualise the construction of knowledge (asset values) in financial statements.

## 5. Through the semiological lens (I): redrawing the dividing line between market-based and entity-specific measurements

The discussion so far has presented the *CFED*'s framing, generally shared by the extant literature, of two contradictory 'pure' value outcomes: *FV* is exclusively market-based and *VIU* is exclusively entity-specific. It has also presented semiology's alternative value framework of two complementary inputs: system-based and statement-based axes constitute one heterogeneous value. Before assessing the extent to which IASB's *FV* measurement prescriptions fit any of these two opposing frameworks, the current section re-engages a preliminary question: what is the dividing characteristic between market-based and entity-specific measurements according to IASB?

### 5.1. Analysis: entity-specific and market-based measurements through the semiological lens

#### 5.1.1. Market measurement as a one-dimensional associative constellation

*FV* is a difference-based measurement: it is anchored in prices of comparable assets in a relevant market, adjusted to reflect relevant differences. The measurement prescriptions under the *FV* hierarchy (IFRS 13, 72–90, B35-6) are a clear manifestation of this principle. If active markets exist for identical assets, there is no need for adjustments: level 1 inputs are “unadjusted” evidence (paras. 76–77). In the less trivial cases, namely in level 2 inputs, the measurement process starts with a market benchmark, i.e. with “quoted prices for similar assets” (para. 82(a)), which then must be adjusted to account for factors specific to the measured asset, such as its location

or physical condition (para. 83). A similar rationale for adjustment, to both cash flows and discount rates, applies where unobservable inputs must be used in model-type techniques under level 3 inputs (see paras. 88, B18–19, B23–30, BC145–146).

*FV* measurement under the three input levels is therefore a process of comparison and adjustment with the market (perfect, imperfect or hypothetical market). As presented in section 3, this is the principle underlying the associative axis. A value is a product of comparison with – of similarity with and difference from – other ‘adjacent’ values. [Fig. 1](#), reproduced from the *Course*, illustrates this principle: the value of the French word ‘*enseignement*’ (teaching) is a constellation of other words that have some common factor with it, such as the verbs ‘*enseigner*’ (teach) or ‘*enseignons*’ (we teach), the similar nouns ‘*apprentissage*’ and ‘*éducation*’ (education), and words that share a similar form (in this case a common suffix) while having a completely different meaning, such as ‘*changement*’ or ‘*armement*’.

Similarly, the value of a certain item measured under IFRS 13 would be a product of a constellation of other similar market-priced items. For example, the value of a used and installed Property Plant & Equipment (PPE) machinery would be determined based on the value of other items that share certain factors but differ in others, such as an identical machinery that is new rather than used, or an identical used machinery that is uninstalled (and see the similar examples in IFRS 13, paragraphs IE11–IE14). The overarching principle here is of similarity and difference: it is therefore a manifestation of semiology's associative axis.

In its anchoring in similarity and differentiation, *FV* measurement is not different from other valuation practices. The role of comparability has been paramount in various domains of calculative practices, whether in securities markets (e.g., [Beunza & Garud, 2007](#); [Sjögren, Hjelström, Hjelström, & Christner, 2017](#); [Zuckerman, 1999](#)), in markets more broadly (e.g., [Beckert & Musselin, 2013](#); [Callon & Muniesa, 2005](#)), or generally in organisational (and not necessarily market) settings (e.g., [Espeland & Stevens, 1998](#); [Lamont, 2012](#)). Conceptualising *FV* measurement of assets in financial statements through semiology's associative axis is compatible with this broadly applied approach. However, there is another, more distinctive, dimension to the valuation of items within financial statements: this is the syntagmatic dimension. This distinctive dimension and its implications will be the focus of attention of the remaining parts of this paper.

#### 5.1.2. Entity-specific measurement as a two-dimensional constellation: adding the syntagmatic axis

The *CFED* formalises the fundamental distinction between “entity-specific assumptions” and “assumptions by market participants” (para. 6.35). But, what do entity-specific assumptions mean, and what makes these different from market assumptions?

The extant literature reviewed in section 2.2 has portrayed the entity-specific perspective – in contradiction to the market perspective – as one which is grounded in estimations of the specific management as opposed to market estimations, which is based on private information as opposed to public information, and which takes into consideration the management's future plans and intentions rather than being restricted to present factual circumstances. The analysis below points, however, to a different and less loaded distinction.

In its 2011 revision, IAS 36 was amended to include the following new section:

Fair value differs from value in use. Fair value reflects the assumptions market participants would use when pricing the asset. In contrast, value in use reflects the effects of factors that may be specific to the entity and not applicable to entities in

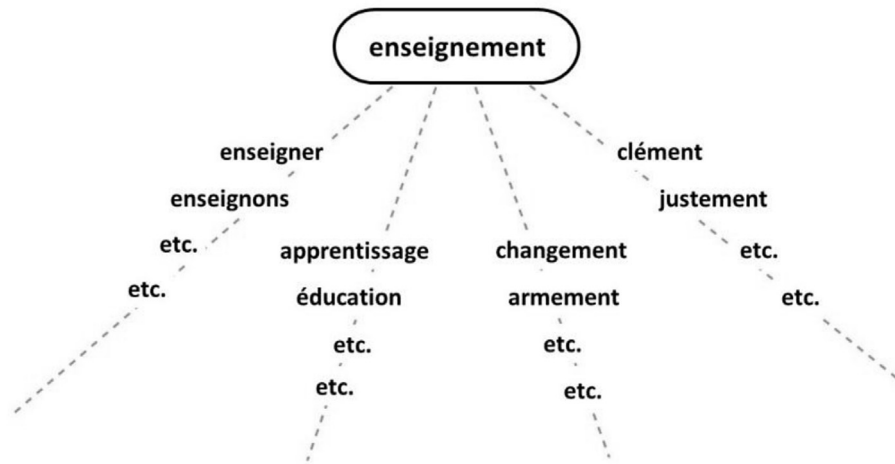


Fig. 1. The associative axis constellation. Reproduced from: Saussure (2011 [1916]), p. 126.

general. For example, fair value does not reflect any of the following factors to the extent that they would not be generally available to market participants: (a) additional value derived from the grouping of assets (such as the creation of a portfolio of investment properties in different locations); (b) synergies between the asset being measured and other assets; (c) legal rights or legal restrictions that are specific only to the current owner of the asset; and (d) tax benefits or tax burdens that are specific to the current owner of the asset (IAS 36.53A).

An entity-specific perspective is translated here as a perspective that is sensitive to the asset's relation with other assets in the entity. This is explicitly evidenced in sub-paragraphs (a) and (b), which discuss the value effects of “grouping of assets” and synergies. It is implicitly evidenced also in sub-paragraphs (c) and (d), as regulatory and tax aspects that “are specific only to the current owner” are impacted by the characteristics of the entity as a whole, with its other assets. They depend on the firm; not merely on the asset. Note that paragraph 53A does not refer to the identity of the estimator (management or market), the type of information used (private or public) or the question of plans versus existing factual circumstances.

Furthermore, a close reading of IAS 36 and its application guidance shows that *VIU* techniques and assumptions, just as those of *FV*, prefer public over private data (para. 33(a)), disregard future improvement plans that are not anchored in existing circumstances (paras. IN8, 33(b), 44–5), and adjust management estimations to those of the market. For example, in calculating an asset's *VIU*, “other factors, such as liquidity” will be taken into consideration only if they would be reflected in the pricing of market participants (paras. 30(e), A1). If comparable assets can be observed in the market, the expected cash flow should be consistent with the market's expectations (paras. A5–6).

Similarly, the discount rate used for capitalising the *VIU* cash flow shall reflect the “current market assessments” of the time value of money and the asset's specific risks (paras. 55, 56, BCZ53–4). Under the application guidance, even when an asset-specific rate is not directly available from the market and the entity needs to use surrogates, the purpose is:

to estimate, as far as possible, a *market assessment of*

- (a) the time value of money for the periods until the end of the asset's useful life; and

- (b) factors (b), (d) and (e) described in paragraph A1, to the extent those factors have not caused adjustments in arriving at estimated cash flows (para. A16; italics added).

Even if the starting point of calculating the discount rate is the entity's weighted average cost of capital (WACC) and its incremental borrowing rate, “these rates must be adjusted: (a) to reflect the way that the market would assess the specific risks associated with the asset's estimated cash flows” (para. A18). All relevant factors that must be taken into consideration in determining both the estimated cash flow and its discount rate, are to be based on market assumptions.

This terminology and way of reasoning is usually associated with *FV*, but, in fact, is applicable here to the entity-specific *VIU*. The *VIU* measurement process is not different from that of *FV*, in that it is based on adjustment to cash flows and discount rates of comparable market-priced assets. The factors to be taken into consideration in the *VIU* measurement (IAS 36, 30–32, Appendix A) are the same factors that are used in measuring *FV* (IFRS 13, B13; *CFED*, 6.35) and they aim at the same rationale – a difference-based analysis.

The remaining distinctive characteristic between the market-based and the entity-specific perspectives is one: it is the sensitivity to the interrelation of the measured asset with the entity's other assets and liabilities. Such sensitivity is lacking from market-based measurement and is present in entity-specific measurement. Semiology suggests therefore the following:

**Proposition 1(a):** *If market-based measurement is a one-dimensional associative constellation of other values, entity-specific measurement is a two-dimensional constellation of values on both the associative and syntagmatic axes.*

The complementarity of the two-dimensional constellation is illustrated in Fig. 2 below. The horizontal axis represents the associative relation, whereby the value of the PPE item (textile machinery) is a product of its comparability (similarity and difference) with similar market-priced assets. The vertical axis represents the syntagmatic relation, whereby the item's value is also (simultaneously) a product of its interrelation with other assets in the specific entity. Intangible assets, such as patents, may for example impact the contribution of the PPE machinery to the firm's operations and earnings; they may impact the value of the measured asset within the specific firm.

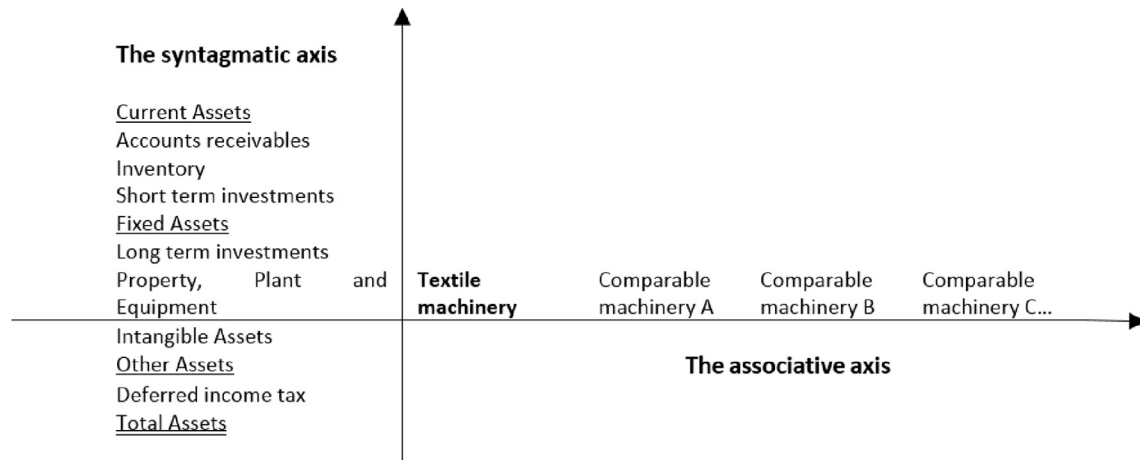


Fig. 2. Two-dimensional value constellation illustrated in a statement of financial position.

### 5.2. Discussion and implications: 'entity-specific' beyond the future/present and subjective/objective divides

The above framing of the distinction between market-based and entity-specific measurements in terms of syntagmatic sensitivity to other items in the financial statement deviates from current economics-based theorisations of the market/entity-specific dichotomy, with significant implications.

Barth and Landsman (1995) explain that entity-specific *VIU* "can provide estimates of the value of intangible assets arising from management skill – a dimension which includes private information, asset synergies and options, including growth options" (p. 99). Synergy is indeed included, but only as one component in a broader argument about the entity-specific perspective being oriented towards the future, with a clear subjective dimension: "Estimation is often difficult for value-in-use because it involves, e.g., prediction of future cash flows, selection of an appropriate discount rate, and knowledge of asset synergies" (pp. 100–1). Hodder et al. (2013) emphasise similar distinctions that derive from the management's particular plans and intentions (p. 169), its "superior skill and foresight" and its anticipated "above market returns" (pp. 167–8; see also Whittington, 2015b, and similarly in earlier characterisations of entity-specific cash flow such as in Sterling, 1979, pp. 127–138).

But the strict dichotomy between 'present' objective facts (*FV*) and future subjective estimations (*VIU*) is susceptible to criticism. All measurements aim to be supported by externally-corroborated facts, and all unavoidably involve subjective forward-looking estimates. As Penman (2007) asserts, "any accounting beyond mere cash accounting involves estimates" (p. 41). In fact, Barth dedicates a paper (2006) to arguing that the future is embedded within all measurements: "This is not surprising because, by definition, assets and liabilities embody expected future inflows and outflows of economic benefits" (pp. 271–2). But as Barth is using this fundamental insight to argue against the exclusion of *FV* when compared to *HC*, she excludes the entity-specific *VIU* on similar grounds (e.g., p. 281). This is also the approach taken by Hodder et al. (2013), as they defend *FV* with the argument that subjective judgment of management is an unavoidable feature of financial reporting "even within the confines of historical cost measurement" (p. 177–8), but dismiss *VIU* as it is based on management anticipation regarding future events (pp. 167–169, 230–1). The subjective judgment inherent in accounting measurement and the orientation to the future are used inconsistently by Barth (2006) and Hodder et al. (2013) as both an argument for *FV* and against *VIU*.

These views are refined with a further argument about the nature of the discount rate to be used in each of the measurement perspectives. Entity-specific value, argues Barth (2006), "requires including expectations of future cash flows that the entity expects to receive, discounted at a rate that reflects the entity's cost of capital, even if these differ from those of other entities" (p. 273). Discussing the same issue, Hodder et al. (2013, p. 167) argue that "The value-in-use measurement basis is silent as to the discount rate to be used in measuring the asset". However, the analysis in section 5.1 above has shown, that even for the entity-specific *VIU*, the discount rate should be based on market assessments. The discount rate (or cost of capital) is therefore also excluded as a distinctive characteristic: *FV* and *VIU* share the same discounting assumptions – those of the market.

Furthermore, the difference in the definitions of *FV* and *VIU* cannot sustain the present/future distinction. Indeed, while *VIU* is defined in future-oriented terms of expected cash flow (*CFED*, 6.34; *IAS* 36.6), *FV* is defined in terms oriented to the present, namely prices in existing markets as of the measurement date (*CFED*, 6.21; *IFRS* 13.9). However, notwithstanding these terminological differences in the definitions, the actual *FV* measurement practices prescribed by IASB are just as much future-oriented and cash flow-based as are those of *VIU*. The characterisation of *FV* is in fact dual, as in addition to the definition which is based on present circumstances (prices), it must reflect the "estimates of future cash flows" and the various factors that may impact the assessment of such future cash flows (*CFED*, 6.23; and see also in *CFED*, Appendix A and *IFRS* 13.B13).

This dual characterisation of *FV* resonates with semiology's dual definition of value. As presented in section 3, in semiology's framework we have both the meaning ('exchange relation'), which is an intrinsic and therefore only ideal relation, and the pragmatic and operational 'co-systemic' relations on the associative and syntagmatic axes. The former is only aimed at indirectly through the two latter. The asset value in financial statements is no different, as future and present go hand in hand in all accounting measurement. As Huikku et al. (2017, p. 77) show, "traces about the past ... frame the future". This temporal duality is at the core of the uncertainty involved in valuation: "Note that uncertainty exists now, with respect to amounts and timings of cash flows that do not yet exist. The challenge for accounting is to capture and structure currently available data (an input) in order to help mitigate the problem of uncertainty with respect to forecasting (an output)" (Barker & Penman, 2016, footnote 6). The future-oriented value is never directly approachable – it is only indirectly interrogated in



the present (see Quattrone, 2016).

The important point here is that the conventional hierarchical dichotomies, which have been used to portray *FV* – but not *VIU* – as objective and factual (in the context of its legitimization vis-à-vis *HC*), are not supported by the IASB's actual measurement prescriptions. Instead, IASB's rules suggest the following, expanding Proposition 1(a) stated above:

**Proposition 1(b):** *If all measurements are dual both in their temporality (future/present) and their epistemological orientation (subjective/objective) – if all measurements aim to be supported by externally-corroborated 'present' facts, and all unavoidably involve subjective forward-looking estimates – we are left with a much less loaded and a much more realistic distinguishing feature for entity-specific measurement: its syntagmatic sensitivity to interrelations with other value-bearers in the particular statement (firm) as a broader value category.*

## 6. Through the semiological lens (II): *FV* as a two-dimensional constellation

### 6.1. Analysis: the presence of syntagmatic entity-specific aspects in *FV* measurement

If, as explicitly proclaimed in IFRS 13.2 and the *CFED*, *FV* is not entity-specific, and if the distinct characteristic of an entity-specific perspective is the sensitivity to the asset's interrelations with other assets and liabilities in the specific entity, then in *FV* measurement an asset should be measured on a standalone basis. As Barth (2006, p. 275) emphasises: “Fair values are comparable because the fair value of any particular asset or liability depends only on the characteristics of the asset or the liability, not the characteristics of the entity that holds the asset or liability”. This disentanglement from the unique situation in favour of generic calculative comparability is an important characteristic of marketisation (Callon, 1998).

The recent introduction (in IFRS 9) and generalisation (in the *CFED*) of the business-model approach, discussed in section 2.1, does not seem to prejudice this view of *FV* as a standalone measurement. Although for the purpose of measurement selection criteria the situational circumstances of the asset in the specific entity are consequential, such circumstances do not play a role in the *FV* (or *HC*) measurement *per se*. If a standalone assessment of the asset is inappropriate – “for example ... if a property is used in combination with other assets to produce goods and services” (6.54(a)) – then *FV* would be considered inappropriate and a retreat to the *HC* default would seem unavoidable. If, on the other hand, *FV* is chosen, entity-specific considerations should be excluded in the actual measurement of the asset. This approach is shared by the recent measurement typology proposals discussed in section 2.2. They all limit the problematisation of *FV* to issues of scope of applicability. The nature of *FV* itself – its non-entity-specific characterisation – is not challenged. However, the following analysis of IASB's measurement prescriptions undermines this taken-for-granted assumption with respect to both financial and non-financial assets.

#### 6.1.1. *FV* measurement of non-financial assets

The entity-specific perspective is embedded into *FV*, firstly, through the introduction of the three valuation techniques. In addition to the market approach, IFRS 13 includes the cost approach and the income approach, although the standard proclaims that all three techniques aim to the same rationale: “The objective of using a valuation technique is to estimate the price at which an orderly transaction to sell the asset ... would take place between market

participants at the measurement date under current market conditions” (para. 62). While the standard is succinct about the three valuation techniques, the underlying issue becomes clearer in the application guidance and basis for conclusions. Under the application guidance, the market approach is not sufficient where assets are interrelated with one another:

In many cases the current replacement cost method is used to measure the fair value of tangible assets that are used in combination with other assets or with other assets and liabilities (IFRS 13.B9).

Similarly, the introduction of the 'valuation premise for non-financial assets' incorporates the entity-specific perspective for cases in which the asset is used “in combination with other assets as a group” (para. 31(a)). The basis for conclusions expands the discussion on this situation of “specialised non-financial assets that have a significant value when used together with other non-financial assets, for example in a production process” (IFRS 13.BC78). In such cases, the IASB acknowledges that the market price cannot capture the asset's current value. It also acknowledges the reason for that – market value lacks the sensitivity to other assets in the particular entity. And so it goes:

When a market price does not capture the characteristics of the asset (eg if that price represents the use of the asset on a stand-alone basis, not installed or otherwise configured to use, rather than in combination with other assets, installed and configured for use), the price will not represent fair value. In such a situation, an entity will need to measure fair value using another valuation technique (such as an income approach) or the cost to replace or recreate the asset (such as a cost approach) depending on the circumstances and the information available (IFRS 13.BC79).

Note, that the need to go beyond market prices is not a derivative of, and is not otherwise related to, the specific market conditions. The limitations acknowledged here are intrinsic to a situation involving interrelation between items. In semiology's terms, this is the unavoidable impact of the syntagmatic axis.

The use of the terminology 'specialised assets' cannot relieve the fundamental inconsistency which is relevant to many business activities, where different resources are uniquely combined in order to produce value beyond the aggregate value of each resource on a standalone basis. With respect to such a common – if not paradigmatic – business-model, there is a clear gap between the IASB's formal conceptualisation of a purely market-based *FV* and its actual measurement prescriptions. While conceptually, entity-specific aspects are excluded, such aspects must be taken into consideration in the actual measurement process prescribed by IFRS 13 and its ancillary guidance. The IASB's prescriptions therefore illustrate the complementarity of market and entity-specific considerations (as illustrated in Fig. 2 above). They suggest the following:

**Proposition 2:** *Fair Value is a two-dimensional value constellation, a product of both differentiation from other items in the general market, and interrelation with other items in the specific firm.*

This fundamental gap between the high-level conceptualisation of *FV* as purely market-based and the IASB's more technical and nuanced measurement prescriptions that incorporate entity-specific considerations, is allegedly bridged through the 'highest and best use' assumption (IFRS 13, paras. 27–32). The hypothetical

market participant is assumed to have the capacity to generate the highest value from the asset "through its use in combinations with other assets as a group" (para. 31(a)). According to the basis for conclusions:

In such situations, the scrap value for an individual asset would be irrelevant because the valuation premise assumes that the asset would be used in combination with other assets or with other assets and liabilities. Therefore, an exit price reflects the sale of the asset to a market participant that has, or can obtain, the complementary assets and the associated liabilities needed to use the specialised asset in its own operations. In effect, the market participant buyer steps into the shoes of the entity that holds that specialised asset (IFRS 13. BC78).

Under the highest and best use assumption, the potential purchaser – a market participant – is assumed to possess the "complementary assets and associated liabilities" (para. 31(a) (i)), and to use the asset with such other assets – or to sell it onwards to someone who would do exactly that (paras. 27, BC74–75). Other assets for this purpose are those "necessary for the asset to function" (para. BC77), or those that are "needed to use the specialised asset in its [the purchaser's] own operations" (para. BC78). A similar approach is taken in the application guidance: the market participant is assumed to have the 'necessary complementary' assets (para. B3).

The interrelation between assets – the core defining feature of an entity-specific measurement – is therefore artificially incorporated into the market-based measurement. The highest and best use assumption flattens the multiplicity of options to combine assets with one another, the heart of business creativity, to a simplistic and unrealistic picture of business life in which an asset has just one set of 'necessary' complementary assets. This intellectual acrobatics is further exemplified in the basis for conclusions:

The IASB concluded that an exit price of an asset or a liability embodies expectations about the future cash inflows and outflows associated with the asset or liability from the perspective of a market participant that holds the asset or owes the liability at the measurement date. An entity generates cash inflows from an asset by using the asset or by selling it. Even if an entity intends to generate cash inflows from an asset by using it rather than by selling it, an exit price embodies expectations of cash flows arising from the use of the asset by selling it to a market participant that would use it in the same way. That is because a market participant buyer will pay only for the benefits it expects to generate from the use (or sale) of the asset. Thus, the IASB concluded that an exit price is always a relevant definition of fair value for assets, regardless of whether an entity intends to use an asset or sell it (para. BC39; italics added).

Instead of using the entity's specific *VIU*, one must estimate a 'market participant's *VIU*', which is a contradiction in terms. This is an attempt to portray situated values as a product of general market prices.

### 6.1.2. *FV measurement of financial assets*

While the measurement consequences of interrelations between assets is an issue which is commonly associated with non-financial assets and especially Property, Plant and Equipment (e.g., Barker & Schulte, 2017; Barker, 2015), it is in fact consequential also in the context of financial assets, although to a different degree and scope. Here too, fractures are found in the conceptual principle that *FV* measurement excludes the entity-

specific context, namely the positioning of the financial asset within the particular entity with its other financial assets and liabilities (its securities portfolio). This is evident specifically in the case of financial assets and liabilities with offsetting positions in counterparty credit risks (IFRS 13, paras. 48–51, 56).

IFRS 13's basis for conclusions (paras. BC108–117) provides the background to this issue in the common practice of entities (especially in the financial sector) to hold and manage financial assets and financial liabilities on the basis of the entity's net exposure to a particular market risk or credit risk of a particular counterparty. A strict market-based approach would necessitate the measurement of each financial asset on a standalone basis, ignoring its positioning in the particular portfolio of the specific entity. However, the practice in the US and elsewhere has been different:

When applying US GAAP, many entities applied the in-use valuation premise when measuring the fair value of such financial assets and financial liabilities. In other words, an entity would take into account how the fair value of each financial asset or financial liability might be affected by the combination of that asset or liability with other financial assets or financial liabilities held by the entity (IFRS 13.BC111).

As shown in section 5, such combination between assets is precisely the distinctive characteristic of an entity-specific measurement, and therefore is at odds with a pure market-based *FV*. The IASB recognised that "using the in-exchange valuation premise was one of the more controversial proposals in the exposure draft", as it ignored the management of assets and liabilities on a portfolio basis (para. BC114), which resulted in a divergence from internal risk management practices that were based on net exposure (para. BC115). Nevertheless, the IASB proclaimed to have rejected the in-use approach in favour of the in-exchange approach. The argument has been that:

The fair value of a financial asset reflects any benefits that market participants would derive from holding that asset within a diversified portfolio. An entity derives no incremental value from holding a financial asset within a portfolio (IFRS 13.BC112).

The clear market paradigm terminology has been further used:

An entity's net risk exposure is a function of the other financial instruments held by the entity and of the entity's risk preferences (both of which are entity-specific decisions and, thus, do not form part of a fair value measurement) (IFRS 13. BC117(b)).

Notwithstanding these declaratory statements, IFRS 13 ultimately provides a 'portfolio exception' that allows the measuring of a group of assets and liabilities on a net exposure basis, if the entity manages these securities on such basis with respect to exposures to market risks or credit risks of particular counterparties (paras. 48, BC118–9). There is again, as in the case of non-financial assets, a tension between the overarching principle of pure market-based *FV* and the nuanced measurement prescriptions that are sensitive to the situated entity-specific (portfolio-specific) positioning of the item.

Furthermore, similar to its introduction of the highest and best use assumption for non-financial assets, in the case of financial assets the IASB allegedly resolves the above tension – the market/entity-specific discrepancy – by assuming an ideal market-based interrelation between the measured item and the other securities in the portfolio. Therefore, the specific composition of the portfolio

is reduced to a hypothetical market scenario:

However, the boards [IASB and FASB] understand that market participants holding that particular group of financial instruments and with those particular risk preferences would be likely to price those financial instruments similarly (ie using similar valuation techniques and similar market data). As a result, the market participants' measurement of those financial instruments within that particular group is a market-based measurement (IFRS 13. BC117(b)).

A similar manoeuvre is found in the actual standard, where the provision of the entity-specific portfolio exception is justified by a market-based hypothesis, with the resulting conclusion:

Accordingly, an entity shall measure the fair value of the group of financial assets and financial liabilities consistently with how market participants would price the net risk exposure at the measurement date (IFRS 13.48).

The entity-specific circumstances are being subjected to an imaginary market scenario, as the specific net exposure position is presented as if measured based on market pricing. However, this is as unrealistic as the highest and best use assumption. This is especially the case in the context of counterparty credit risks, as distinct from market risks. In the latter case, the risks are systematic, but in the former they are entity-specific. Credit risks are of the particular counterparties that are included in the specific portfolio; they cannot be covered by generalised market assessments. This is, in fact, acknowledged by the IASB:

Because the bid-ask spread (which is the basis for making adjustments to an entity's exposure to market risk to arrive at the fair value of the net position) does not include adjustment to counterparty credit risk ... the boards [IASB and FASB] decided to specify that an entity may take into account its net exposure to the credit risk of a particular counterparty when applying the exception (IFRS 13. BC124).

Indeed, reflecting the interrelations of the measured item with other items based on specific counterparty risks cannot be market-based. Similar to the case of non-financial assets, *the IASB is juggling between a formal posture that excludes entity-specific considerations and actual prescriptions that embrace them: between a posture of a one-dimensional value and a reality of a two-dimensional value.*

## 6.2. Discussion and implications: the intrinsic irreducibility of the two dimensions of FV

The ideal market-based assumptions regarding hypothetical interrelation between assets – the highest and best use assumption and the market-perspective's net exposure assumption – are as unrealistic as a standalone assumption. Either the syntagmatic axis is prescribed with zero contribution to the item's value (in the standalone assumption), or it is prescribed with an imaginary maximum contribution ('highest and best' complementarity). In both cases, the particularities of the actual situation are excluded.

<sup>5</sup> Though Whittington bases his argument on the lack of perfect markets (and perfect knowledge), while this paper's argument, as discussed above, is not dependent on the market conditions. It should also be noted that Whittington endorses the notion of deprival value, which is more of "a method of choosing between measurement bases" (Whittington, 2015a, p. 566), while this paper's interest is in the FV measurement basis *per se*.

As Whittington (2010, p. 109) puts it, the notion of a market participant that is in the exact situation of the entity itself in terms of information and resources, "makes nonsense of the idea that the resulting measure is non-entity specific".<sup>5</sup> It is not surprising therefore that IASB re-balances this fictitious assumption with a more pragmatic assumption: one can assume that the current use is the highest and best use, unless market or other factors suggest otherwise (IFRS 13, paras. 29, BC71).

The analysis above illustrates therefore the fracture of the market/entity dichotomy, which the IASB's narrative elevates. Importantly, the analysis anchors this fracture in the IASB's own guidance. The 'problem' is not solely one of imperfect implementation by preparers as seems to be suggested in previous studies, including Barker and Schulte (2017) and Huikku et al. (2017). This relocation of the problematisation of the entity/market dichotomy allows, in fact, the reconciliation of these two studies, which have shown that the entity-specific perspective plays a role even in allegedly market-based measurement (Barker & Schulte, 2017) and that the market perspective plays a role even in allegedly entity-specific measurement (Huikku et al., 2017). The findings of each of the above studies are only seemingly paradoxical (Huikku et al., 2017, p. 78), and their trends are only seemingly diverging. Both studies are reconcilable through the two-dimensional value principle:

**Proposition 3(a):** *Values within financial statements – whether Fair Value (e.g. for PPE) or Value-in-Use (as in impairment) – are two-dimensional. They have both associative (market) aspects and syntagmatic (entity-specific) aspects. IASB's own guidance – and not only preparers' behavioural or institutional tendencies – reflects this principle.*

The standard-setter's perspective investigated here complements the insights gained from studies that have taken the perspective of standard users. Indeed, studying "how accounting and audit decisions are made" (Cooper & Robson, 2006, p. 435) through "the interpretation and implementation of rules" (p. 428) is enlightening (see also Hatherly, Leung, & MacKenzie, 2008); but so is the study of the nuanced techniques prescribed by standard-setters. One may even argue that a detailed and critical study of the standard-setter's prescriptions is a pre-condition to the study of their implementation by standard users. At least, these are complementary approaches. Complementing the "interest in translations from financial standards into financial accounting practices" (Huikku et al., 2017, p. 69), the analysis above points to the translation (gap) between the standard-setter's proclaimed concepts (as in the CFED or the declaratory statement of IFRS 13.2) and the detailed measurement techniques prescribed by it. Through such a focus, the paper shows how the IASB does not 'come clean' (Bougen & Young, 2012, p. 400) with its own prescribed practices, with respect to the consequential issue of the exclusivity of the market perspective in FV. The paper proposes therefore the following:

**Proposition 3(b):** *The limits of the market perspective in Fair Value are conceptual and inherent to the standard-setter rather than restricted to implementation issues or contingent to market conditions.*

This re-characterisation is important, because the focus on implementation issues has been a core tenant of the mainstream accounting literature, with the consequence of a restricted development in conceptual financial accounting theory. Whittington (2015a) discusses the shift in the focus of academic research away from conceptual debates on value measurement, and argues

that one of the reasons for this shift has been the realisation that “in a realistic economic environment, characterised by imperfect and incomplete markets, income and similar ideal economic summary measures are ill-defined” (p. 557). In the specific issue of *FV*, Penman (2007) summarises the predominant approach along the same lines: “In short, fair value accounting is a plus, implementation issues aside” (p. 37). Such a framing of the issue – as one of implementation – implicitly keeps intact the overarching principle of the market as the ultimate arbiter of *FV*, if only as an ideal objective.<sup>6</sup> As discussed above, this is the case not only for the traditional literature but also for the organisational strand. The re-characterisation of the issue as immanent to values in statements, as proposed here, sheds a different light on the limits of the market paradigm in accounting, and offers a more fundamental reservation from the identification of *FV* with market prices.

Such a re-framing of the issue is in line with a broader understanding of the incapacity of calculative power to generalise values beyond their situated contexts. As Stark (2009, p. 14) has argued, following Frank Knight and John Dewey:

The problem of uncertainty, it must be emphasized, is not a function of the limited calculative power of the human actors confronting it. Instead it is a property of the situation. The situation is indeterminate.

Similarly, the indeterminacy of the accounting value is not a matter of the calculative power of markets but rather a property of the statement and of business activities underlying it. Unique interrelations produce more (or less) than the mere aggregate of standalone resources, that cannot be captured in an idealised hypothetical scenario of interrelations. This is also what semiology emphasises in the context of values within statements, where the two-dimensional value constellation is irreducible to a one-dimensional constellation (Saussure, 1993, p. 133). Hence, the use of ideal assumptions – the highest and best use assumption and market-based net exposure assumption – could not have truly resolved the tension. The attempts to collapse the syntagmatic axis to the associative one are intrinsically untenable. Explicating this semiological characteristic of accounting value, becomes an issue of advancing a more realistic, reflexive and ultimately responsible conceptualisation of accounting measurement. It is particularly important today, as calculability reaches new frontiers through an emerging data science, to acknowledge the incapacity of generalised market prices to fully capture the specificity of individual judgment, unique interrelations, and situated value constellations (see also Quattrone, 2016).

These conceptual concerns are also translatable to a concrete and timely policy issue: business-model measurement, which, as briefly presented in section 2.1, has been officially introduced for financial instruments and has been implicitly generalised in the *CFED* for all asset types. One of the main objections to the business-model approach has been the argument that it is based on subjective plans rather than objective facts. Such criticism is based on the assumption that ‘business-model accounting’ is equivalent to ‘intent-based accounting’ (as in the title of Leisenring, Linsmeier, Schipper, & Trott, 2012: “Business-model (intent)-based accounting”; and see also Hodder et al. (2013), p. 169). However, re-interpreted as sensitivity to other value-bearers in the statement

(syntagmatic sensitivity), the entity-specific perspective underlying business-model accounting is not less factual than market-based accounting. Business-model measurement is not intent-based measurement: it is ‘merely’ a situation-sensitive measurement. Furthermore, the analysis and theorisation proposed here suggest that there is more to business-model measurement than what is presented in IFRS 9, the *CFED* and the recent academic proposals discussed in section 2.2. These have acknowledged the two irreducible dimensions of situated measurement, but have drawn the consequences from that irreducibility only at the level of measurement selection criteria. This paper, on the other hand, has shown that the sensitivity to the interrelation between accounting items is found within IFRS 13’s measurement prescriptions per se.

Conceptualising business-model measurement as fact-based rather than intent-based does not mean ignoring the role of judgment, but rather bringing it to light. Judgment is and must be acknowledged, but in this, business-model measurement is not *a priori* different from other measurement concepts. Discretion plays a fundamental role throughout the accounting process, and it therefore cannot be used, as such, to rule out the business-model approach or the entity-specific measurement. Acknowledging the limitations of the market paradigm need not result in going back to *HC*, which in any event does not solve the issue of sensitivity to interrelations. It requires, instead, a more forthright approach to the role of the entity-specific syntagmatic axis alongside the market-based associative axis and to the judgment that is involved in valuation decisions made on both axes.

## 7. Conclusions, limitations and further research

In order to challenge the taken-for-granted assumption about the exclusive market perspective of *FV* measurement, this paper has mobilised an analytical tool outside accounting’s traditional disciplinary resources, namely semiology’s value framework with its two-dimension relational scheme. This scheme has been influential in other realms of the social sciences but not in accounting. One such realm is Actor-Network-Theory (ANT), particularly in the work of Bruno Latour, who has explicitly acknowledged semiology as ANT’s original theoretical foundation (e.g., Latour, 1996). Latour follows not only the general concept of (‘flat’) relationality, but also semiology’s specific model of two-dimensional relationality, and he expands it well beyond the boundaries of social sign systems (see, e.g., Czarniawska, 2014, p. 113). For him, the associative and syntagmatic axes provide nothing less than “a set of concepts that could replace the technology/society divide” and that “might help to rephrase some of the traditional questions of social order and especially that of the durability of domination of power” (Latour, 1990, p. 103). In his mobilisation of the two-axis model in the context of technological innovation, Latour makes an explicit reference to its origins in linguistics (though these axes are now renamed): “We thus define two dimensions: association (akin to the linguist’s syntagm) and substitution (or paradigm<sup>7</sup> for the linguists)” (Latour, 1990, p. 106). And elsewhere:

Linguists claim that these two dimensions allow them to describe the system of any language. Of course, for the analysis of artifacts we do not have a structure, and the definition of a grammatically correct expression is meaningless. But if, by substitution, we mean the technical shifting to another matter, then the two dimensions become a powerful means of describing the dynamic of an artifact. The syntagmatic

<sup>6</sup> Jones and Wells (2015, p. 575) point to an odd situation in accounting research when it comes to the ideal efficient market hypothesis: “While hard-core support for the efficient market hypothesis has diminished in finance, and was never particularly strong in economics, it is still receiving strong support and endorsement from the leading accounting journals”.

<sup>7</sup> Saussure’s original term – ‘associative’ – has been frequently replaced in later generations by ‘paradigmatic’.

dimension becomes the AND dimension (how many elements are tied together), and the paradigmatic dimension becomes the OR dimension (how many translations are necessary in order to move through the AND dimension) (Latour, 1992, p. 171).

The associative-syntagmatic model continues to be crucial in Latour's recent work:

To use a linguistic metaphor, if the beings of reproduction define some kinds of syntagmas (lines of force for inert beings, lineages for the living), might we not say that the beings of metamorphosis define paradigms, possible series of transformations, vertiginous trances? We would then be sketching a matrix made of the crossings between horizontal lines – reproductions – and vertical lines – metamorphoses or substitutions. They would form the warp and the woof of which all the rest is woven (Latour, 2013, p. 287).

To allow the broader applicability of the model, Latour redefines the term 'statement':

By statement we mean anything that is thrown, sent, or delegated by an enunciator. The meaning of the statement can thus vary along the way, and it does so as a function of the load imposed by the enunciator. Sometimes it refers to a word, sometimes to a sentence, sometimes to an object, sometimes to an apparatus, and sometimes to an institution ... The word 'statement' therefore refers not to linguistics, but to the gradient that carries us from words to things and from things to words (Latour, 1990, p. 106).

Latour's metaphorical extension of the semiological model has quite different explanatory objectives and ambitions than those of Saussure. The interest of the former is in 'statements' as programmes of actions (Latour, 1990, p. 107), while that of the latter is in statements in their modest version. ANT provides a framework for the study of behaviour following imperative 'statements', very broadly and metaphorically defined; semiology provides a framework for the study of the production of constative (or imperative) statements, conventionally defined. The contrast with ANT was meant to show, that *if there is one single domain other than language statements, for which semiology's theorisation of value constellation – in its original form and without analogical expansions – is of the highest relevance, it is the domain of financial statements*. In both cases, the object of enquiry is the construction of statements in their conventional meaning – whether their building blocks (value-bearers) are words or numerical entries.

With the semiological lens, this paper offers two specific contributions to extant literature on value measurement and its market orientation. First, in contrast to previous interpretations, the paper proposes and substantiates a reinterpretation of the entity-specific/market divide in a manner that does not depend on the untenable temporal and epistemological distinction between present objective facts and forward-looking subjective judgment. In line with semiology, entity-specific is ultimately a sensitivity to the interrelation between the statement's items (the firm's resources), namely a sensitivity to the syntagmatic axis. Second, the paper exposes the unsustainability of *CFED's* and *IFRS 13's* proclaimed overarching principle, generally assumed also in the extant literature, that *FV* is a purely market-based value and not an entity-specific value. The paper shows how it is both. The study thereby expands the boundaries of *FV* critique from the question of its appropriate scope of applicability, to the realm of its inherently complementary characteristics. *It shifts attention from the contingent limits of*

*markets to the inherent limits of the market paradigm.*

Importantly, the paper also provides a complementary perspective to the recent discussions in organisational studies of accounting on the heterogeneous and disharmonious nature of accounting value and in particular that of fair value. While the traditional strand has focused on the standard-setter's perspective but assumed the homogeneous nature of *FV*, the organisational strand has challenged the nature of *FV* but only from the practitioners' perspective and not from the standard-setter's perspective, which in fact has been taken-for-granted. Therefore, instead of focusing on the behavioural or institutional aspects of how the market perspective is curbed in practice by the preparers of financial statements (Barker & Schulte, 2017; Huikku et al., 2017), the current paper explicates *how marketisation is inherently curbed by the standard-setter itself*. Furthermore, while other studies (e.g., Zhang & Andrew, 2014) have focused on the narrative of IASB's conceptual framework showing the increasing trend of financialisation in its rhetoric, this paper has taken the opposite approach of looking beyond the narrative and into the actual measurement techniques and assumptions, which give rise to quite different findings.

This distinction and its importance may be illustrated by reference to the recent study of Georgiou (2017), who identifies a dissonance (Stark, 2009) in the characterisation of *FV* between standard-setters and standard users, and concludes: "Investors and analysts do not value fair values as expected by standard-setters, as they are interested in accounting numbers that help them assess how the business has performed, rather than accounting numbers that provide market valuations of individual assets and liabilities" (p. 45). However, Georgiou's empirical focus is on users – on implementation – while the depiction of the standard-setter's perspective is brief and based on secondary sources from individual standard-setters. It is based on what standard-setters say they do, rather than on what they actually do (Barker & McGeachin, 2015). This results with a simplified version of the standard-setter's perspective, as if *FV* is equivalent to an exclusive market-based valuation of standalone items with no reference to the firm's performance as a whole. As the current paper has shown, an analysis of the details of the IASB's actual prescriptions reveals a much more complex and sophisticated attitude precisely with respect to these important issues: it reveals that *the value dissonance exists already within the sphere of the standard-setter*.

This 'internal' focus that semiology allows is also its limitation. The production of financial statements – with their items' values – is a multi-stage process, which involves the agency of different stakeholders and factors. Various acts of translation are involved in the process (Robson et al., 2017). Semiology provides an insight to one layer of a multifaceted phenomenon. Indeed, recent 'valuation studies' have focused on the social situation in which practices of valuation take place in particular space and time settings (e.g., Hutter & Stark, 2015; Kornberger et al., 2015; Muniesa, 2011). Semiology focuses on a different aspect (of a different order) of the value situation. However, as Mennicken and Millo (2017) and Vargha (2016) highlight, research on the socio-historical context of valuation should be supplemented with an attention to the accounting valuation technologies themselves, including models, concepts and infrastructures. In line with this view, semiological analysis is complementary to, not a substitute for, sociological accounts of value production. As Roland Barthes emphasized: "Semiology, once its limits are settled, is not a metaphysical trap: it is a science among others, necessary but not sufficient" (1993, p. 112). Put differently: in a broader 'accounting constellation' (Burchell, Clubb, & Hopwood, 1985), 'value constellation' is only one component, but, as shown above, it is one which is consequential and under-explored.

Finally, the specific case of *FV* as theorised here may serve as an illustration of a more general issue that requires attention in the broader studies of calculative practices (e.g., Miller & Napier, 1993) or valuation and evaluation practices (e.g., Lamont, 2012), and can thus trigger further research. As discussed in section 5.1.1, comparability and classification based on differentiation and similarity have played an important role in the extant literature's theorisation of valuation practices. Contemporary studies in accounting (e.g., Lorino, Mourey, & Schmidt, 2017; Sjögren et al., 2017) and beyond (e.g., Prato & Stark, 2017) continue to advance our understanding of the situatedness of valuation through relations of comparability and distinction. Such previous and contemporary studies have shown how an item's value is not merely a product of its own qualities (an intrinsic view of value) but is a product of its relation with (and positioning vis-à-vis) other elements in the system (e.g., the market). In semiology's terminology, these studies have added more and more layers in the understanding of the associative dimension of value.

The case of *FV* presented in this paper, on the other hand, points to a complementary and under-investigated dimension of value: the syntagmatic sensitivity to the relation between value-bearers (e.g., assets) in a broader value category. The financial statement is an obvious, but not the only, manifestation of such broader value category encompassing interrelated items. In the context of art valuation, for example, an artist's portfolio may also be considered as a broader value category. The insufficiency of benchmarking an art item to comparable items in the market has been acknowledged, as well as the value impact of other factors such as the artist's broader "oeuvre – the artist's full body of work" (Coslor, 2016, p. 19). Such factors are at least partly captured in the syntagmatic axis.

The crucial point is that the associative and syntagmatic axes are two categorically different value dimensions: "Neither order of relations is reducible to the other" (Saussure, 1993, p. 133). In this regard, the current case is particularly illuminating, as *FV* – the hallmark of accounting financialisation – may have been perceived as the ultimate paradigmatic instance of one-dimensional value constellation, but in fact has been shown to be two-dimensional and thereby situational. This case illustrates therefore, that the topological-taxonomic nature of value – its anchoring in similarity and differentiation – is not always enough; classification and categorisation are sometimes only 'half of the story'. While the relationality of value with the general system has been widely investigated, the relationality with the broader value category (e.g., statement or portfolio) requires more attention. With semiology, the relationality of value is refined and multiplied to two distinct dimensions, and the constitutive context of value is refined and divided to two distinct spheres. This conceptual distinction with its pragmatic consequences may serve as a background for further investigation into the irreducible specificity of value situations.

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