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A flank movement in the understanding of valuation

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Abstract: The sociological understanding of valuation often starts with an idea of value as something that something has by virtue of how people consider it (that is, it is socially constructed, a convention, a social representation, a projection). At some point, however, analysis also often draws a contrast between this sort of appraisal and some other type of value that the thing may have as a result of its own condition (what it costs, how it is made, with what kind of labour, money and materials, what it is worth in relation to objective standards and fundamental metrics). Dissatisfaction with this binary approach has been expressed in various quarters, but the pragmatist contribution of John Dewey provides a particularly useful resource with which to engage with the subject. This article reviews some aspects of this dissatisfaction, with a focus on the pragmatist idea of valuation considered as an action. I discuss this idea in relation to financial valuation, referring in particular to early pedagogical materials on corporation finance elaborated in the context of the professionalization of business administration. Finally I elaborate on the usefulness of a pragmatist stance in the understanding of financial valuation today.

Keywords: valuation, pragmatism, corporation finance

Introduction

Defending a pragmatist attitude in the study of value requires replacing the very notion of value with the notion of valuation.[1] In what follows I briefly discuss some aspects of John Dewey's call to do just this and contrast it with the notion of valuation put forward, in the same period, in corporation finance and business education, focusing in particular on the teachings of Arthur Stone Dewing at Harvard University. The aim in drawing this contrast is to help refine a contemporary pragmatist approach to valuation: that is, one that makes the distance between value and its measure collapse in an analytically constructive manner. I conclude with some reflections on the historical opportunity offered by what I call, after Dewey, a 'flank movement' for the contemporary understanding of valuation.

Pragmatism and the problem of value

In 1913, *The Journal of Philosophy, Psychology and Scientific Methods* (later to become simply *The Journal of Philosophy*) and, to a lesser extent, *The Philosophical Review*, initiated in their pages, at the request of the Executive Committee of the American Philosophical Association, a very interesting discussion thread on 'the problem of values' (Spaulding, 1913). One initial formulation of the problem goes like this: '[i]s Value (1) something which is ultimate and which attaches itself to "things" independently of consciousness, or of an organic being with desires and aversions, or (2) is it a characteristic which a thing gets by its relation to the consciousness of an organic being, or to an organic being with desires and aversions?' (McGilvary *et al.*, 1913: 168). One first, almost immediate, reaction to this formulation of the problem is by John Dewey: '[t]he formulation seems unnecessarily tied up with the idealistic-realistic controversy. I recognize that this complication has the advantage of preserving continuity in the discussions from year to year; yet it is possible that the questions at issue might, in the present juncture, be dealt with in the end more effectively if approached by a flank movement' (Dewey, 1913: 268–269). As would be made clear in further published exchanges on the problem, Dewey's 'flank movement' consists in a shift in subject matter from value (or values) to valuation, considered explicitly as an action.[2] Dewey writes for instance that

> [s]peaking literally, there *are* no such things as values. . . . There are things, all sorts of things, having the unique, the experienced, but undefinable, quality of value. Values in the plural, or value in the singular, is merely a convenient abbreviation for an object, event, situation, *res*, possessing the quality. Calling the thing a value is like calling the ball struck in baseball, a hit or a foul". (Dewey, 1923: 617, emphasis in the original)

Emphasis on the activity, process or practice of valuation rather than on value as something in itself was critical in Dewey's attempts at pulling the debate away from what he called the 'idealistic-realistic controversy'. Considered in the terms of the modern 'objective–subjective' bipolar scheme, the controversy quite fades away: to say of something that it is 'done' subjectively or objectively is less mutually exclusive than to say that it 'is' subjective or objective. Observed through the more classical angle of the philosophical debate on the reality of ideas, the controversy also dissolves to some extent: if reality is action and ideas are acts too (a fair summary of the pragmatist standpoint), then there is not a great deal in quarrelling about the difference.

After having observed that 'a value, in short, means a *consideration*, and a consideration does not mean merely an existence, but an existence having a certain claim upon the judgement to be formed' (Dewey, 1915a: 516, emphasis in the original), Dewey writes that

> the conclusion is not that value is subjective, but that it is practical. The situation in which judgement of value is required is not mental, much less fanciful. It is existential, but it exists *as* something whose good or value resides (first) in something to be

> attained in action and (secondly) whose value both as an idea and as existence depends upon judgement on what to do. Value is 'objective,' but it is such in an active or practical situation, not apart from it. To deny the possibility of such a view, is to reduce the objectivity of every tool and machine to the physical ingredients that compose it, and to treat a distinctive 'plow' character as merely subjective. (Dewey, 1915a: 516, emphasis in the original)

Here, as in many other places in the discussion, Dewey rejects the bifurcation of value in favour of an understanding of valuation as some sort of performance.

But Dewey's 'flank movement' was difficult to establish, demanding in terms of its own clarification, and repeatedly confronted by dualism, not only in philosophical discussion but also, perhaps more fatally, in ordinary ways of talking. As he puts it in one of his more elaborate efforts of elucidation (his *Theory of Valuation*):

> [W]hen attention is confined to the usage of the verb 'to value', we find that common speech exhibits a double usage. For a glance at the dictionary will show that in ordinary speech the words 'valuing' and 'valuation' are verbally employed to designate both *prizing*, in the sense of holding precious, dear (and various other nearly equivalent activities, like honouring, regarding highly) and *appraising* in the sense of *putting* a value upon, *assigning* value to. This is an activity of rating, an act that involves comparison, as is explicit, for example, in appraisals in money terms of goods and services. The double meaning is significant because there is implicit in it one of the basic issues regarding valuation. For in *prizing*, emphasis falls upon something having definite *personal* reference, which, like all activities of distinctively personal reference, has an aspectual quality called emotional. Valuation as *appraisal*, however, is primarily concerned with a relational property of objects so that an intellectual aspect is uppermost of the same general sort that is found in '*estimate*' as distinguished from the personal-emotional word '*esteem*.' That the same verb is employed in both senses suggests the problem of upon which schools are divided in the present time. Which of the two references is basic in its implications? Are the two activities separate or are they complementary? In connection with etymological history, it is suggestive (though, of course, in no way conclusive) that 'praise,' 'prize,' and 'price' are all derived from the same Latin word; that 'appreciate' and 'appraise' were once used interchangeably; and that 'dear' is still used as equivalent both to 'precious' and to 'costly' in monetary price. (Dewey, 1939: 5–6, emphasis in the original)

Value can be understood as something that something has by virtue of how people consider it (how they personally like it, in particular), but also as something that something has as a result of its own condition and of its relation to other things (for instance, in relation to work or to money, or to any sort of standard metric). Valuation, in turn, refers to something that happens to something, and this happening can be a matter of consideration or of relation, or both at the same time. In this sense, the idea of valuation may be tackled in the same way in which the notion of signification is elaborated in pragmatism – that is, as an action.[3] It is interesting to note in this respect that, parallel to the discussion on valuation, John Dewey was also defending the theory of signification of Charles Sanders Peirce (Dewey, 1946). At that time, the 1940s, the pragmatist theory of signs had suffered from Charles W. Morris's influential interpretation of the 'pragmatic', supposedly based on Peirce (Morris, 1938). Morris famously introduced the 'interpreter' (that is, the person who, quite subjectively indeed, makes sense of a sign) as a key feature of the process of semiosis (Peirce's word for the action of the sign) and called 'pragmatic' (as opposed to 'syntactical' and 'semantic') the relation of signs to 'interpreters'. But, as Dewey suggests, 'one has only to read Peirce to see that Morris's account effectually splits apart the very subject-matters with which Peirce labors in order to provide an integrated solution' (Dewey, 1946: 87). He adds:

> The misinterpretation in question consists in converting *Interpretant*, as used by Peirce, into a personal user or interpreter. To Peirce, 'interpreter,' if he used the word, would mean *that which interprets*, thereby giving meaning to a linguistic sign. I do not believe it is possible to exaggerate the scorn with which Peirce would treat the notion that *what* interprets a given linguistic sign can be left to the whim or caprice of those who happen to use it. (Dewey, 1946: 87, emphasis in the original)[4]

Financial valuation and the pedagogy of business

Did Dewey's 'flank movement' succeed? His call for a pragmatist approach to the study of valuation certainly resonates with more recent social-scientific vocabularies in economic sociology, in organization studies and the anthropology of economic exchange.[5] But the 'realist-idealist' syndrome sneaks into social-scientific discussions on value often enough to suggest that the fulfilment of the pragmatist ambition is still in question. Value as socially constructed, as a convention, as a collective representation, as a projection, a speculation or a point of view, cohabits with value as a problem of metrics in accounts of material conditions. The recent financial crisis provides an interesting test for this continuing cohabitation of positions. Some commentators propose that financial value was badly estimated and that incorrect valuation practices were followed, whereas others claim that the crisis is a consequence of a self-sustaining, delusive system of beliefs and opinions breaking down. The fact that valuation is a costly and irregular activity that brings value about (it is, very literally, a construction)[6] does not go unnoticed, but is neglected in favour of an exacerbation of the differences between what is objective and what is subjective. Yet, before and throughout the crisis, financial valuation was neither subjective nor objective: it was practical, and while this practice was sometimes a matter of turning things into objects of valuation, and at other times about turning persons into subjects of valuation, it was indeed and above all quite an activity.

Take, for instance, the notion of 'valuation' as it is used in financial professional practice. It means precisely that: to account for value (to 'consider' it), but in an active and practical manner, in which value is precisely formed for the purpose of business. The notion is meant to be openly performative. Valuation practitioners in finance may talk about valuation being smart or not, but they know, at the same time, that something (such as, for example, an asset) does not have the same value before and after it has been valued; that value depends on how valuation is done, when, by whom and for what purpose; and that to value is a highly creative process. The value of an asset is, so to say, entirely in their hands.

An interesting source for the understanding of the pragmatics of valuation in finance is the proliferation, in roughly the same period in which the philosophical discussion on 'the problem of values' was taking place, of pedagogical materials focused on business in general and on the valuation of corporate securities in particular. The distinctively North American world of which that discussion was a part was much concerned with valuation as a topic for business, capitalist enterprise and corporate finance. At the time the discussion mentioned above started (Spaulding, 1913), for instance, Walter Lippmann was getting his *Drift and Mastery* published: a book that mentions, among other topics deemed of interest to progressive opinion-makers, the development of graduate schools of business administration (Lippmann, 1914: 46–47). The Harvard Business School (that is, the Graduate School of Business Administration of Harvard University) had been founded a few years before (Copeland, 1958).[7] The professionalization of the North American businessperson was acknowledged to be a crucial issue, and valuation was considered as a (perhaps the most) relevant practical component of this businessperson's professional skills.

In Arthur Stone Dewing's *Financial Policy of Corporations*, for example, the personae required for 'the organization and establishment of the corporation as a going enterprise' were presented as follows: 'as business enterprise has become more intricate, especially when conducted under the form of the corporation, promotion has become correspondingly intricate, involving the cooperation of a specialized kind of entrepreneur ability and large amounts of capital. The former is represented by the promoter and the latter by the banker' (Dewing, 1920: 3).[8] The banker values the enterprise, in order to finance it; the promoter imagines the banker valuing the enterprise, in order to give the enterprise value. The profitable business enterprise springs from this interaction. Dewing writes that the investment banker's judgement 'is a matter of business intuition' and that he 'must feel, with extreme sensitiveness, the intangible atmosphere that surrounds every enterprise' (Dewing, 1920: 33). Valuation is about the investment banker and the entrepreneur imagining and sensing each other, simulating each other but also stimulating each other.

In further editions of his *Financial Policy of Corporations*, Dewing further clarified his take on valuation by adding new sections devoted to 'the problem of value': '[i]t may concern the business as a going enterprise; or it may concern the property employed in the business, both tangible and intangible. However phrased, further study of the financial operations of the business rests on an understanding of what we mean by the values of a business' (Dewing, 1941: 173). Dewing was not Dewey, of course, and, although he was probably convinced of the view that valuation is a 'practical' affair, he also subscribed to a psychological, individualistic ideal of valuation, compatible with a liberal, bourgeois standpoint:

> Value is subjective; it is based on individual human experience. Hence, when the individual tries to find an objective standard or criterion for his own personal values, he is confronted with endless confusion. Value changes from hour to hour; value is different according to the standards of experience and the standards of judgement. Consequently, when attempts are made to set up legal postulates to control economic value – such postulates as original cost or the cost of reproduction – nothing but uncertainty and contradiction results. In the end the test of value is pragmatic – where does the judgement of most men meet? (Dewing, 1941: 175)

One can recognize here elements of a sort of a mild pragmatism, a form of pragmatist thought in which the depth of the philosophical discovery is removed and replaced by a floppy idea of adventure in the face of uncertainty and courage after the failure of knowledge.[9] But it is nonetheless useful to observe some correspondence, some correlation between the pragmatist discussion on valuation and the progress of financial pedagogy.

These were, in any case, the kinds of things that were taught at the Harvard Business School, by Dewing and others, in the 1920s and 1930s. The Harvard Business School was also the site in which an important pedagogical device was developed in that very same period: the case method of instruction in business administration (Fraser, 1930, 1931; McNair, 1954). It would be probably going too far to say that the case method is, in essence, a pragmatist device, but it undoubtedly has some pragmatist aspects, or at least partakes of a number of ideas that connect to the North American pragmatist tradition. Dewing was again here at the forefront. As a Professor of Finance at the Harvard Business School he wrote, in defence of the case method, that education 'asks not how a man may be trained to know, but how a man may be trained to act'; that it 'deals with the oncoming new in human experience rather than with the departing old'; adding that 'power to deal with the new and power to think are pragmatically the same, even though logically the two expressions may not have the same connotation' (Dewing, 1930: xxii).[10] Note the distinct philosophical tone to his opinion of the content of educational knowledge in business: 'when one attempts to reach fixed and certain facts, not to say truths, underlying human action, one is confronted with an intricate and disordered heteronomy of happenings apparently devoid of order and causal relation. The situation is at its worst – or, perhaps, most complex – stage when we attempt to discover order and scientific precision among the events of social economics' (Dewing, 1930: xxiii). He adds:

> This increasingly complex social environment, into which the young businessman is thrown, requires resourcefulness, mental courage, confidence in the untried – in short, exactly those qualities which in the space of three centuries brought into existence a new nation and a new economic order. Πάντα ῥεῖ, and the ideal of our business education ought to be to teach young men to meet the oncoming flow of things with the courageousness and resourcefulness of their forefathers (Dewing, 1930: xxv).

There was in the past, and still is in the present, a variety of approaches to case-based pedagogy in business education, but a shared distinctive feature is an emphasis on form, process and experience. The case method of instruction in business administration is about enacting a business situation, living it almost for real, or in a very realistic fashion. But the reality of business is not considered in terms, for instance, of an empirically realistic depiction of the day-to-day life of a company. The reality of business is, rather, rendered in terms of the reality of 'mental courage', of the making of a vital, psychological and exciting act of decision in the face of uncertainty. Actual business documentation serves the purpose of realism – and source books such as Gerstenberg (1915), referred to for instance in Fraser (1930: 515), were important in the development of realism in the pedagogy of corporation finance. But the situation inside the classroom resembled business rather by means of expression, through the staging of and required participation in an act of business appraisal and decision. In his own philosophical disquisitions, Dewing had written (not, it must be said, directly about business but in connection with the notion of reality) that 'the expression of life, self-expression in its fullest sense, is for each one of us the thing above all worth while' (Dewing, 1910: 149), adding the following: 'I feel that I am real; this feeling demands self-expression' (Dewing, 1910: 168).

In the first edition of Dewing's *Financial Policy of Corporations* (1919, reprinted in 1920), the key word for valuation was "promotion" – also the central topic of the second volume (the book was initially published in five volumes, then six). In the 1934 edition, a new volume devoted entirely to 'valuation' was introduced, and transformed into a chapter in the two-volume edition of 1941 (Welk, 1935: Feller, 1941).[11] One important notion is the capitalization of earnings (or the rate of capitalization):

> The phrase, capitalization of net earnings, is frequently used both in present-day discussions of business theory and in the current literature of economics. The idea behind it is simple, but the practical application of this idea to a concrete case is difficult. Nevertheless, in spite of the practical difficulty of determining a definite and precise value for a specific business, the capitalization of earnings is the only means at our disposal for determining the value of a going business. This is because the business, as a going enterprise – a combination of organization, fixed and current capital – was designed primarily to earn profits. Its value is measured by the extent to which it conforms to this purpose. (Dewing, 1941: 182)

The usual implications in terms of capitalistic investment follow, that is, valuation is understood as the act of virtually 'buying' the business with the aim of making money:

> [u]nder our competitive system of economic values, the business is the instrument which creates the earnings, and the valuation of the business is the valuation of this instrument. It is true, too, under our competitive system, that the price which men pay for this instrument will depend on the relative certainty with which these earnings can be counted upon to continue. In other words, the rate at which a business shall

> be capitalized, to obtain its value, will depend on the confidence the buyer may feel in the continuation of the earnings. (Dewing, 1941: 183)

A number of observations can be made concerning this vocabulary of valuation. The first is that value is something that is obtained, objectively, when the business enterprise is made fit for valuation and enters into such a process. It is clear by now then that the valuation of business means the financial valuation of corporate securities, and that the 'financial policy of corporations' consists precisely in getting enterprises prepared and organized for this valuation. The second is that great emphasis is put on purpose: the valuation of something is held to be best aligned with the business purpose of that thing. The situation in which the value of a business is required to be considered is thus a practical situation. The third is the correspondence established between the act of valuation and the act of purchase, which is recognized as an act of investment in the vehicle of valuation (the buying of corporate securities, the provision of credit, etc.). The interplay between the businessperson and the capitalist investor in their many forms – between the 'promoter' and the 'banker' – is visibly at the heart of the valuation process. Of course, as indicated by Dewing, this is what corporation finance is about in a capitalist system in which emphasis is put, as Polanyi (1944) would have indicated, on the production of earnings through markets for money (that is 'our competitive system of economic values'). But what is quite striking, I believe, is the openness and clarity with which Dewing translates the constructivist aspect of valuation: an operation in which both the appraisal of the characteristics of something in terms of its value and the setting of that thing for the purpose of making it valuable (a 'going enterprise', as Dewing likes to say) intermingle, and become two aspects of the same act (valuation).

Valuation is, in short, about capitalization. Estimation of return on capital becomes the key to financial valuation and, as Dewing writes, '[p]erhaps the most difficult and, so far as results are concerned, the most important point in any theory of value based on earning power, is the rate at which earnings shall be capitalized' (Dewing, 1941: 185). He adds:

> [T]he determination of this rate is at best a matter of guesswork, but guesswork supported by the evidence of prices at which businesses of various kinds are being actually valued at any one time. And this evidence from current experience with reference to the value of different enterprises can be culled out not only from the prices at which enterprises are actually sold, but also from the valuation put upon them by bankers extending credit to them and by investors who are willing to buy their bonds and stocks. In other words, such guesswork is subject to the best kind of pragmatic test, namely the evidence of actual experience. (Dewing, 1941: 186)

In the context of this discussion it is particularly interesting to read Dewing writing about a 'pragmatic test' (although the use of this expression is probably only loosely connected to a proper understanding of the pragmatist standpoint). The 'pragmatic test' (which financial valuation consists of) concerns neither emitting a personal opinion or desire about a business nor measuring a set of external features exhibited by a business, but rather the 'actual experience' of getting it bought and capitalized, that is, the conversion of a business into a ratio between income and cost (that is, the cost of capital). The quantitative transfiguration of corporate finance later to be prompted by Modigliani and Miller (1958), for example, is not far (see Nitzan and Bichler, 2009).

The flank movement and financial capitalism

A comprehensive understanding of the performative aspects of corporation finance requires a more detailed examination than I can provide here.[12] My purpose is more limited: to make clear the meaning of Dewey's 'flank movement' in the understanding of valuation. The 'flank movement' is, I have suggested, partly recognizable as a pragmatist strategy. As was pointed out in reference to Peirce, rather than considering signs as such, a pragmatist perspective considers signification as an action. The same way of thinking applies to values: a pragmatist viewpoint shifts attention to valuation as an action. In both cases, this idea of 'as an action' should be understood in the sense of a process, a form of mediation, of something that happens in practice, something that is done to something else, and so forth; value is definitely not something that something just has. If value is something that something just has, then we need to ask: by virtue of what? In answering such a question, we might easily make use of the classic division between reality (things, the world, objects, matter, etc.) and what or whoever looks at it (mind, thought, the knowing subject, ideas, opinion, self, etc.). In doing so, we would be preserving the 'continuity' that Dewey identified in the formulation of 'the problem of values' by the Executive Committee of the American Philosophical Association (Spaulding, 1913; McGilvary *et al.*, 1913; Dewey, 1913). The 'flank movement' consists precisely in putting that continuity aside and approaching what happens in a more agnostic, empirical manner – a radical, pragmatist departure from the classical division in fact allows a tracing of the empirical origination of its two terms.

The case of valuation in corporation finance (its pedagogical unfolding in the context of the professionalization of the businessperson) is of interest, then, because it provides a compelling illustration of the adequacy of a pragmatist view on valuation. Valuation is about considering a reality while provoking it. It implies the virtual act of 'obtaining value', as is made clear in the very notion of capitalization. The valuation of corporate securities is an interpretation of the business enterprise, but, so one might say, paraphrasing the defence of Peirce's theory of signification by Dewey (1946), this does not need to lead to an idea of, say, the investment banker being an 'interpreter', emitting a view. Signification (read 'valuation') happens because what interprets the business as a valuable object is itself a relational, active process out of which something can hold as the sign (read 'the value') of something. In the case examined above, this involves a series of inter-related processes such as the description of the business as an instrument which creates earnings, the plotting of a virtual action of capital investment, the simulation of its consequences and the actual setting of the business (by the proverbial businessperson, which is itself a valuation device) as something fit for this process.

It is not claimed that Dewey has a monopoly on the 'flank movement': rather, the movement is a constant, albeit sometimes underground current in philosophy, and it has been expressed in many other ways by other people in other times. Gilles Deleuze (who claimed at many points affiliation to pragmatism in philosophy) has, for example, highlighted many particularly acute instances of the 'flank movement' in philosophical thought, including Nietzsche's philosophy of values (Deleuze, 1962), the notion of expression in Spinoza (Deleuze, 1968), and the idea of the simulacrum in stoicism (Deleuze, 1969). But Dewey's take on the problem of valuation is located in a context (the shaping of North American liberal thought, the Progressive Era, the Great War, the Roaring Twenties and the rise of Corporate America, the Wall Street Crash of 1929 and the Great Depression) for which a 'flank movement' was perhaps particularly suitable and which bears some resemblances with the situation that obtains today.

The current situation is indeed characterized to some extent – as Dewey's America was – by a crisis in the representation of value.[13] The fact that valuation is a form of performance (almost in the dramaturgical sense of the world) is exposed sometimes in a puzzling way. In ethnographic depictions of investment banking today, particular attention is paid to the importance of shareholder value or, more precisely, to the narrative unfolding and performative staging of 'shareholder value' as a massive professional shibboleth (eg Ho, 2009: 122–212). It has also been shown recently how the moral persona of the 'free investor' serves as a crucial element of the professional imaginaries that inform the work of valuation in the financial services industry (Ortiz, 2010). Furthermore, Deleuze's approach to the simulacrum has been used in anthropology to analyse the functioning of the contemporary stock market (Hertz, 2000).[14] Precautions of a pragmatist sort have also been taken in the examination of valuation techniques used in financial markets, for instance through increased attention to what valuation formulas actually do rather than to what they are meant to represent (Maurer, 2002; MacKenzie, 2006). In short, work in the anthropology of contemporary finance focuses, to a noticeable extent, on aspects of the choreographies of valuation described in the specialized literature of Arthur Stone Dewing and others, and may thus 'be dealt with in the end more effectively if approached by a flank movement' – as John Dewey would have said (Dewey, 1913: 269).

Periods of unrest in valuation often open interesting opportunities for the questioning of available theories of value and for the renewal of the intellectual repertoire, sometimes also of the political one. It would of course be entirely justifiable to interpret, for example, the intellectual move of considering capital not as a thing in itself but rather as a relation as an instance of a flank movement; it is, of course, one central but often overlooked characteristic of the move that Karl Marx undertook in the reading room of the British Museum.[15] But the oblique stance on valuation is clearer in North American pragmatism. It suited the rise of the North American businessperson and the North American financier, their professional craft, the performative aspects of their work of valuation, their adventurous philosophy and the dramaturgy of the 'going enterprise' they set out to create. Today's financial reality (today's financialized reality) is heavily indebted to the practices that were developed during that period, and consequently a contemporary pragmatist stand can perhaps further our understanding of what is going on.

Notes

1 I am grateful to Horacio Ortiz, Talha Syed, Michel Callon, Liliana Doganova, David Stark, Celia Lury, Lisa Adkins, Helen Verran, Peter Karnøe, Margareta Bertilsson, Anders Blok, Maria Duclos Lindstrøm and two anonymous reviewers for comments and conversations in relation to this paper. The research is supported by ERC Starting Grant 263529.

2 Notable further interventions in the discussion thread include, in chronological order, Dewey (1915a, 1915b, also in 1916), Urban (1916), Perry (1917), Bush (1918), Dewey (1918), Picard (1920), Costello (1920), Dewey (1922), Picard (1922), Prall (1923), Dewey (1923), Prall (1924), Clarke (1925) and Dewey (1925a, 1925b). Dewey (1939), a landmark in the discussion, is then followed, for instance, by Rice (1943a), Dewey (1943a), Rice (1943b, 1943c), Dewey (1943b), Geiger (1944) and Dewey (1944).

3 A price, which is an instance of valuation, can very well be considered as a sign. But a pragmatist appraisal of this calls for an understanding of signification in a proper pragmatist sense – that is, as a process. For an analysis of stock prices using Charles Sanders Peirce's theory of signs, see Muniesa (2007).

4 The 'flank movement' is also at work in the following clarification: '[w]e seem to have here further evidence of the extent to which the type of logic presented by Morris and others is controlled by the epistemological heritage of a knowing subject, person, self, or what have you, set over against the world, or things, or objects, and capable of reference to the latter either directly in virtue of its own faculty (epistemological realism) or through an idea or thought as intermediary (epistemological idealism)' (Dewey, 1946: 89).

5 See for example Stark (2009), Vatin (2009), Ortiz (2005, 2010), Lury and Moor (2010), Kockelman (2006, 2010), Guyer (2009), Maurer (2006), Barrey (2006), Anzalone (2009), Muniesa (2007), Teil and Muniesa (2006), Callon, Millo and Muniesa (2007), Caliskan and Callon (2009, 2010), Doganova and Eyquem-Renault (2009), Karnøe (2010), Verran (2007) and Hoeyer (2009) for some recent contributions.

6 The idea of something being a 'construction' (or a 'social construction') is often interpreted, quite strangely and despite repeated materialist warnings (eg Latour, 1999), as being 'mental', 'ideal' or 'not quite real' (but a bridge over the river is both constructed and very real).

7 For a detailed sociological analysis of the history and purposes of business schools in the United States of America, with particular attention to the Harvard Business School, see Khurana (2007). For an examination of the lives and works of pragmatist philosophers in the context of the transformation of higher education and intellectual elites (especially in Boston and Cambridge, MA), see Menand (2001), and for a broader contextualization of the pragmatist moment in North American thought, see Purcell (1973) and Lears (2009).

8 Dewing's *Financial Policy of Corporations* was a widely read manual. For a couple of reviews of its multiple editions, see Simpson (1921), Welk (1935), Feller (1941) and Hunt (1943).

9 This is a vision of pragmatism that has been transmitted by many commentators, including for instance Rorty (1979).

10 Dewing's introduction to the case method, quoted here from Fraser (1930), is also printed for instance in Fraser (1931) and McNair (1954).

11 I use here the one-volume version (published without footnotes) of the 1941 edition.

12 The examples examined here could for instance be confronted to different ways in which economic valuation can be staged and the corresponding business realities provoked. A quite useful, coetaneous, North American contrast could be drawn for example with Veblen (1921). For a study of connections between institutionalism in economics and pragmatism in North America, see Mirowski (1987). For a historical contextualization, see Yonay (1998).

13 See Shell (1982) and Agnew (1986) for an exploration of this form of crisis in earlier contexts.

14 Ellen Hertz shows how the Deleuzian notion of the simulacrum (Deleuze, 1969), as opposed for instance to a Baudrillardesque one (Baudrillard, 1981), serves the anthropology of financial valuation in a crucial way. The notion helps countering in particular the absurd idea according to which financial value would not be real (Hertz, 2000).

15 An explicitly semiotic, relational (and hence radically pragmatist) view of capital, inspired by Marx, is what the reader can get, for example, in some parts of Deleuze and Guattari (1972, 1980; see also Guattari and Alliez, 1983).

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