The boundary of time: Heidegger's phenomenology of time as the precursor of a new pedagogy

ROBERT SHAW

School of Management
Guangdong University of Foreign Studies
Guangzhou
P.R.China

Abstract

Whilst "boundary" is a spatial notion, the recent dramatic changes in provisions for tertiary education relate as much – if not more – to the boundary of time than to space. Consequently, we might expect the literature on pedagogy to embrace the phenomenology of time and explore the temporal relationships between student and learning. This paper contributes to that literature. It identifies in Heidegger's work the alternative conceptions of time which we might apply in an analysis of phenomena which pertain to teaching and learning. In this it takes an historical perspective and thus emphasises the early questioning of time in psychology and Heidegger's development of the concept of time until 1927. The paper then uses this perspective to gain insights into the ontological nature of the student, primarily using Heidegger's "Care Structure". This, in turn, suggests a theory of pedagogy.

Keywords: pedagogy, learning, phenomenology, temporality, Heidegger.

Introduction

Educators lecture, organize and manage online pedagogy without much reflection on the concept of time that is inherent in their practice. Time is a resource that the clock records and which managers and educators alike account for in a balance sheet of unproblematic categories. Use your time profitably, do not waste time, require students to be on time, and profit by asynchronous communications. Global communication technologies, such as Skype, encourage us to track the availability of our colleagues as the day proceeds – we know when to call people around the world. It is not necessary to further elaborate the current technologizing of pedagogy (Peters, 2003). Each of us, as individuals, finds ourselves bound within a period, the time that we live: we know when our time began and we expect our resource of time to expire soon enough. Time in this configuration appears in physics and in psychology. It is now well over two-hundred years since the philosopher Immanuel Kant expressed despair over the possibility of the discipline of psychology ever establishing itself as a credible science (See chapter 3, Teo, 2005). Since Kant wrote, both physics and psychology have stumbled over the concept of time inherent in their enquiries. Tertiary educators do not universally find the theories of psychology helpful in their work with students. Those teachers with an ear for history may appreciate an opportunity to return to the concerns of the first psychologists and begin again. "The 19th century is crucial in the transformation of psychology to a natural-scientific enterprise ... a process of loosening and separating psychology from philosophy" (Teo, 2005, p. 39). This paper contributes to the reversal of the nineteenth century transformation. The strategy below is to first consider the awareness of the difficulties inherent in the concept of time as expressed in the work of the early psychologists, and then to being with Heidegger's concept of time and seek to gain a perspective on how that might enlighten the tertiary educators practical interest in students.

The understanding of time in psychology (William James)

The analysis of teaching and learning practices frequently draws upon the constructs of psychology. As the discipline of psychology produces an ever-growing number of scientific enquires into education it behoves us to recall the problematic of time that dogs them all. The first modern psychologists, in the nineteenth century, record their concern about this problematic. We can read that time perturbs an influential proponent of modern psychology, the scientifically inclined American William James. Our day-by-day, hour-by-hour, minute-by-minute thoughts vary and in *The Principles of Psychology* (1890) James suggests a graph to record how the content of consciousness relates to clock time:

If we represent the actual time-stream of our thinking by an horizontal line, the thought of the stream or any segments of its length, past, present, or to come, might be figured in a perpendicular raised upon a horizontal at a certain point. The length of this perpendicular stands for a certain object or content, which in this case is the time thought of, and all of which is thought of together at the actual moment of the stream upon which the perpendicular is raised. (James, 1950, p. 629)

James develops his analysis from Ward's "masterly article" in the *Encyclopaedia Britannica* (9th edition, page 64) which summarises the common view of time. Like Ward, James quotes Volkmann:

In short, when we look at the matter sharply, we come to this antithesis, that if A and B are to be represented as occurring in succession they must be simultaneously represented; if we are to think of them as one after the other, we must think them both at once.

That this concern about the human experience of time was not for James a mere construct within the discipline of psychology shows in his invited series *Talks to Teachers*. James introduces his professional audience to the unity of consciousness with another quotation, this time the "unusually candid confession" of Wilhelm Wundt (1832-1920), the founder of the "new psychology" and the first to call himself a *psychologist*. Wundt is influential in the development of the discipline globally (The history is given by Teo, 2005, p. 40). After thirty years of laboratory work Wundt confesses, as James records it, that he stumbles at a major hurdle:

"I attained an insight into the close union of all those psychic functions usually separated by artificial abstractions and names, such as ideation, feeling, will; and I saw the indivisibility and inner homogeneity, in all its phases, of the mental life. The chronometric study of association-processes finally showed me that the notion of distinct mental 'images' [reprodicairten Vorstellungen] was one of those numerous self-deceptions which are no sooner stamped in a verbal term than they forth-with thrust non-existent fictions into the place of the reality. I learned to understand an 'idea' as a process no less melting and fleeting than affect of feeling or of will, and I comprehended the older doctrine of association of 'ideas' to be no longer tenable. . . . (James, 1900, p. 25, Footnote A)

Reflection on his work suggests to Wundt that he is studying abstractions or constructions that are not truly indicative of the subject matter of psychology.

Besides all this, experimental observation yielded much other information about the span of consciousness, the rapidity of certain processes, the exact numerical value of certain

psycho-physical data, and the like. But I hold all these more special results to be relatively insignificant by-products, and by no means the important thing." – *Philosophische Studieii*, X. 121-124. The whole passage should be read. As I interpret it, it amounts to a complete espousal of the vaguer concept of the stream of thought, and the whole business, still so industriously carried on in text-books, of chopping up "the mind" into distinct units of composition or function, numbering these off, and labelling them by technical names. (James, 1900, p. 25, Footnote A)

Ladd in his comparison of Volkmann and Wundt says this:

Wundt, who is known as a leading authority in physiological and experimental psychology, has definitely committed himself to the opinion that it is impossible to effect a complete separation between psychology and philosophy. The relation between the two is, he affirms, so close and peculiar that the attempt at a partition of sovereignty results in an abstract scheme which, in the presence of actuality, must always appear unsatisfactory. (Ladd, 1895)

Wundt labels the results of the discipline of psychology to be "insignificant by-products" and James urges us to read the whole passage. The superficiality inherent in psychology perturbs Wundt and James and we can speculate on what they might say to teachers today who are implicated in an industry which chops the mind and labels (to use the expression of the footnote).

An alternative way to consider the time and the student (Martin Heidegger)

There are many ways to bring Heidegger's insights in *Being and Time* into the study of education. Three of these are rather obvious. The first is to produce a Heideggerian phenomenology through some involvement with real-world teaching and learning. The second is to use Heidegger's concept of truth as the foundation of an analysis of practical schooling or learning. At least in the discussions of the present author, teachers still understand truth to be a foundation of their work at school, even when the teacher and the curriculum hold instrumental purposes. The first and second strategies appear in a recent enquiry into secondary school practice in science education (Shaw, 2010). Gibbs uses the first strategy in his analysis of higher education as work, and although he draws upon Heidegger's most extensive analysis of work, which, as it happens, appears in a book entitled *History of the Concept of Time*, the critical sections are not specifically about time (Gibbs, 2010; Heidegger, 1925/1985, pp. 189-200, Section 23, particularly Part a) and Part b)). These sections are a phenomenological analysis, which approaches its subject in a manner that is familiar to us from the famous hammer example in *Being and Time*.

The third obvious way to bring Heidegger's insights in *Being and Time* into the study of education is to begin with Heidegger's apprehension of the foundational structure of the human being *conceived as time* and to allow this to provide access to deliberations about educational practice or pertinent human constructs such as concepts. The present paper – which is a very preliminary exploration – contributes to the third strategy.

In the introductory section of *Being and Time*, Heidegger asserts the relevance of time to being:

Time must be brought to light—and genuinely conceived—as the horizon for all understanding of Being and for any way of interpreting it. In order for us to discern this, time needs to be explicated primordially as the horizon for the understanding of Being,

and in terms of temporality as the Being of Dasein, which understands Being. (Heidegger, 1927/1962, p. 39)

Being (roughly, existence) and beings (objects, concepts) – all that involves us – depends on time as the horizon of *understanding*. Thus, the student engaged in (say) online learning and the teacher (writing tasks for students), here conceived as Dasein-student and Dasein-teacher, and the curriculum, and the concepts taught, and the skills taught – all depend on time. The dependence is more fundamental, foundational than simply teaching at a particular time (as indicated by the clock), or learning "in the period" as students learn "at school". Rather, time is inherent in the capacity to be at school, or to teach, or to engage with course content. As Heidegger says:

This task as a whole [he is speaking generally but we draw our examples from teaching-learning] requires that the conception of time thus obtained shall be distinguished from the way in which it is ordinarily understood. (Heidegger, 1927/1962, p. 39)

We understand time in a most inadequate way. We have lost the earlier understanding that human beings had of time and now we must regain that understanding if we are to better apprehend humanness. The process whereby we lost our original understanding of time evidently began with the Greeks and shows in the work of Heidegger's contemporary, the French philosopher Henri Bergson (1857-1941):

This ordinary way of understanding it [time] has become explicit in an interpretation precipitated in the traditional concept of time, which has persisted from Aristotle to Bergson and even later. Here we must make clear that this conception of time and, in general, the ordinary way of understanding it, have sprung from temporality, and we must show how this has come about. We shall thereby restore to the ordinary conception the autonomy which is its rightful due (Heidegger, 1927/1962, p. 39)

Heidegger achieves a spectacular breakthrough in the Western understanding of time. This occurs relatively early in his career and the important ideas are little developed after the publication of *Being and Time* in 1927. Subsequently, he appears to have abandoned his specific project on the essence of time and its implications. He leaves us with a host of questions about his breakthrough. Some notice that later "time erupts" into Heidegger's various projects.

... time does not disappear, but continually erupts—as overcoming the spirit of revenge (in Nietzsche), as reserve and efficiency (in "the Question Concerning Technology"), as thanking and commemoration (in What is Called Thinking?), as restitution(in "The Anaximander Fragment), as founding and presenting (in On the Way to Language), and so on. (Wood, 1993, p. 157)

It is ambitious to take up the challenge where Heidegger left off. David Wood is one who does this in his "exploratory" paper (Wood, 1993) and the present paper can do no more than raise questions.

To conclude this introduction, the current global engagement with time, exemplified in the marketing pronouncements of many tertiary teaching institutions and exemplified in many Western nations by the call for tertiary teachers to achieve more in less time, gives us reason enough to contemplate the notion of time. Yet it does not take much reflection to appreciate that there are more profound questions to consider regarding time in education. The indication of these above draws forward their historical position. These are more thoroughgoing questions

than those that are mere manifestations of Western modernity. When we attend more precisely to the situation of students – caught in the web of marketing and pedagogy – there arises a need to describe more adequately the being of the student. The purpose of this is to open for us a pathway to a new pedagogy. This necessitates our shaking ourselves free from the hegemony of psychology. As it happens, the epistemological inadequacy of modern psychology was apparent to the founding figures of the discipline, many of whom were perplexed about concept of time involved in psychological explanations. Others who see the need for a new pedagogy also embrace strategies that are dismissive of psychology. For example, the phenomenologist van Manen develops accounts of what is involved in felt, sensed, relational pedagogical practices (van Manen, 1990, 2007). These are, evidently, "pathic dimensions of pedagogy" to explore (Vagle, 2010a, 2010b). Barnacle (2009) re-asserts the importance of instinct without cognition.

Heidegger's concept of time

The problematic of time features in the second part of Heidegger's major text, *Being and Time* (1927/1962). Philosophers dispute what Heidegger intends to say about time in the 1927 text and about how to translate several of the critical passages about time. The interpretation here takes an historical approach to what Heidegger said and wrote. Little progress could have been made with such an approach before the publication of Kisiel's work *The Genesis of Heidegger's "Being and Time"* (1993).

Heidegger's first significant public presentation on the concept of time - a "demonstration" lecture delivered on 27 July 1915 as the last step to achieve his certification (Habilitation) to teach – was based on his doctoral dissertation of 1914. He published the lecture as "Der Zeitbegriff in der Geschichtswissenschaft" in Zeitschrift für Philosophie und Philosophische Kritik 161 (1916), subsequently he revised and republished it and an expanded version appears in GA1. The Concept of Time in the Science of History is Thomas Sheehan's translation, whilst other translators say The Concept of Time in Science and History, which is perhaps more descriptive of the content (Heidegger, 1916/2002). The address is an epistemological-ontological enquiry which seeks to contrast the concept of time in historical science (the discipline of history) with that in the physical sciences (Heidegger, 1916/2007; Kisiel, 2002, pp. 36-37). Heidegger begins with a primer on the philosophy of science to answer his initial leading question: "Within physics, what structure must the concept of time have in order to function as a concept of time that corresponds to the goal of physics?" (Heidegger, 1916/2007, p. 63). The discipline of physics renders time as a homogenized, spatial parameter. This contrasts with the discipline of history where time rests upon specific, known, phenomena that humans' experience. Heidegger contrasts history and physics for his audience to raise ontological problems such as what is "true" time and what is the foundation (ground) that enables the two notions of time.

The enquiry into time continues after Heidegger moves to be an associate at The University of Marburg in October 1923. He explains his views in an address under the auspices of the Marburg University Theological Faculty in July 1924 (Heidegger, 1924/2007). This address is largely phenomenological in its approach to the subject and it has many illustrations. Notwithstanding the caveats about *Being and Time*, for the Faculty (some say the Theological Society) at Marburg he begins with the classic question ("what is time") and speaks with clarity and confidence (This is evident in Kisiel's "paraphrase" which is based on the notes taken by

those present, Heidegger, 1924/2007, p. 197). He begins with a concept that allures and bewitches his audience, 'eternity':

If time finds its meaning in eternity, then it must be understood starting from eternity. The point of departure and path of this inquiry are thereby mapped out in advance: from eternity to time. This way of raising the question is in order, provided that such a starting point is available to us, that is, that we have an acquaintance and an adequate understanding of eternity at our disposal. (Heidegger, 1924/2007, p. 200)

In this opening Heidegger alludes to the theologian's frequent assertions about time. Eternity is beyond everyone's experience and an enduring mystery for us (One commentator takes issue with the substance of these remarks, Alweiss, 2002). Instead, we believe we experienced the past, are in the present and will be in the future notwithstanding the event of our death. This is the concept that James asserts to when he discusses the analogy to a river and suggests the graph. The elderly founder of modern psychology, Wundt, finds it unsatisfactory. Likewise, for different reasons Heidegger also finds this concept unsatisfactory – and he suggests an alternative way by which we might access time.

In the Summer Semester of 1925 Heidegger lectures on "The History of the Concept of Time" (GA20). At least that is the announced topic. The course itself is wide ranging in the topics it addresses, including categories, truth and phenomenology as a method approached historically. Subsequently the lectures were published as by Petra Jaeger who transcribes Heidegger's "minuscule and sometimes almost illegible hardwiring" (Kisiel's Forword, Heidegger, 1925/1985, p. xv). The title is Prolegomena zur Geschichte de Zeitbegriffs (History of the Concept of Time: Prolegomena) (GA 20, Heidegger, 1925/1979). Kisiel subsequently produces a more readable translation of the lectures, which he acknowledges is his interpretation, based on Heidegger's original notes and the records of a student who attended the course. Of much interest (particularly to scholars from the practical disciplines, management, nursing and teaching) in these lectures are the sections on the structure of the "work-world" (Section 23). Thus, the sections specifically on time are a small part of the course. The Second and final Division is entitled "The Exposition of Time Itself" and it is only 25 pages of a 329-page book. Much of the Division concerns death, and it is a more full account than that in Being and Time. In Kisiel's judgement regarding the scope of the lectures vis-à-vis 'time':

In fact, only the First Division of the First Part of that [announced] outline, "the preparatory description of the field (namely Dasein) in which the phenomenon of time becomes manifest," is developed in any great detail. (Heidegger, 1925/1985)

It is necessary to be precise about how Dasein, a being with but one ontological "time" relates to ordinary time, our everyday concern with time, or as Heidegger says "World-time".

The approach in the present paper is to pursue Heidegger's concept of time through his Care Structure: Section 31 of *Being and Time*, "Care as the being of Dasein" formulates the concept of 'Care' but there is little new material; the structure is a systematic re-formulation of material he discusses earlier. So, how does this ontological structure – the Care Structure of Dasein – relate to time? He says:

Later, as the interpretation proceeds, this basic structure of care will lead us back to the constitution of being which we shall then come to understand as *time*. (Heidegger, 1925/1985, p. 295, his italics)

Heidegger grounds notions of time in the Care Structure; it is not the other way round. First understand the way of being, and then worry about the nature of time.

In ¶65 of *Being and Time*, "Temporality as the Ontological Meaning of Care", Heidegger interprets the trifold structure of Care as temporality and each of these separately he grounds in temporality.

Accordingly:

The proposition, "Dasein is historical", is confirmed as a fundamental existential ontological assertion. This assertion is far removed from the mere ontical establishment of the fact that Dasein occurs in a 'world-history'. But the historicality of Dasein is the basis of a possible kind of historiological undertstand which is in turn carries with it the possibility of getting a special grasp of the development of historiology as a science. (Heidegger, 1927/1962, p. 381).

Where do we find the student? The student appears as Dasein – a way of existence which holds a particular relation to a very particular *foundation* or *ground*. This way of existence facilitates time as we now commonly describe it because a more primordial temporality is available. The way of existence of a rock or a tree does not hold the same involvement of time as that which pertains for Dasein. Dasein's potential to "generate" time subsequently enables Dasein to construct the construct of time that made the psychologists anxious. It enables the construct of time in all the endeavours of science: time became a profound problematic for the modern discipline of physics in 1905 when Einstein published (Einstein, 1982, 2001; Maudlin, 2011).

The Care Structure

The presentation below elaborates the Care Structure, and then relates this to time, the student and finally pedagogy. The Care Structure of Dasein we discern through the practice of ontological phenomenology. There must exist, however, a structure that founds this discernable structure. Thus, the Care Structure is the *penultimate* phenomenon (Heidegger, 1925/1985, p. 294). Such a more foundational or grounding structure, although more difficult to discern, will be greater than Care: "Originality does not entail simplicity ... in the field of ontology all springing from [*Entspringen*] is degeneration", says Inwood (1999, p. 152) who quotes *Being and Time*.

The structures of the psychologists (including those of experiment and cognitive theory) and those of the physicists are for the Dasein *derived* from the Care Structure. When we seek a theory of pedagogy which is ontological (that is, based upon the Care Structure, because that is as grounded as we can get) we attempt to move from fundamental ontology to ontic structures (concrete theory, objects, categories). This is exactly the move hidden within psychology and physics and the other intellectual disciplines of science.

What is the "Care Structure of Dasein"? "Proximally and for the most part, care is circumspective concern" (Heidegger, 1927/1962, p. 381). 'Heidegger's *ontological* use of the word "care" is a recasting of the use of the German word "*Sorge*", which has a "range of senses" (Inwood, 1999, p. 2). Heidegger makes two innovations:

First he uses 'care' in a broad sense which underlies its diversification into the careworn, the careful and the caring [the ontic, commonly understood sense]. Second [ontological],

in this sense of 'care', he insists, everyone cares; no one is wholly carefree, careless or uncaring. It is only because everyone is, in this fundamental sense, care-full, that we can ever be carefree careless or uncaring in the ordinary, or as he has it, the 'ontical', senses of these words. In the 'ontological sense of 'care', everyone cares. All human beings, again, are ahead of themselves (*sich vorweg*), roughly 'up to something' or look out for what to do. (Inwood, 1999, pp. 2-3)

The ontological structure of care is foremost the fundamental orientation of the human being towards the future. We are always "pushing into the future", "up to something", "concerned about what we are doing but also we are constantly concerned about ourselves" (proximally and for the most part, this is circumspective concern). The Care Structure elaborates such insights.

Chapter VI in *Being and Time* (¶39 to ¶44) elucidates "Care as the Being of Dasein". He first reminds us that "Being-in-the-world is primordially and constantly *whole*" and Dasein exists factically (with its ontological situation given to it by a host of circumstances and issues) (Heidegger, 1927/1962, p. 225). The Care Structure he discerns entails three constituent features, all of which appear in various ways earlier in his works however he now brings them into a formal ontological configuration: *Being-already-in-the-world*, *Being-alongside-entities-in-the world*, and *Being-ahead-of-itself*.

Being-already-in-the-world he associates with thrownness and facticity. Dasein enduringly finds itself in a given, factical situation often much not of its own making, and with a limited number of possibilities for itself. In addition, the Dasein always finds itself with befindilkeit – a mood, attitude, "emotional" disposition. This is always Dasein's ontological situation. Being-alongside-entities-in-the world, Dasein is always "up to something", engaged in a task, in play with world, even if it is no more than day-dreaming.

Being-ahead-of-itself is an enduring, prominent aspect of how Dasein engages. In its engagement with World, this casting to the future is the stance inherent in being Dasein.:

Dasein is always 'beyond itself' ["über sich hinaus"], not as a way of behaving towards other entities which it is not, but as Being towards the potentiality-for-Being which it is itself. This structure of Being, which belongs to the essential 'is an issue', we shall denote as Dasein's "Being-ahead-of-itself". (Heidegger, 1927/1962, p. 236)

The human phenomena of willing and wishing are derived from this ontological base. We never remain satisfied for long for our ontological character asserts itself.

As indicated, the tripartite integrates and thus the essential linkage between Dasein and World – Dasein-World, the one way of being.

"Being-ahead-of-itself' means, if we grasp it more fully, "ahead-of-itself- in-already-being-in-a-world". As soon as this essentially unitary structure is seen as a phenomenon, what we have set forth earlier in our analysis of worldhood also becomes plain. The upshot of that analysis was that the referential totality of significance (which as such is constitutive for worldhood) has been 'tied up' with a "for-the-sake-of-which". (Heidegger, 1927/1962, p. 236)

The phrase "for-the-sake-of-which" refers to the manner in which the tripartite gains expression with Dasein. Dasein's dynamics are addressed in the appearance of ontological understanding in *for-the-sake-of-which cascades*.

The fact that this referential totality of the manifold relations of the 'in-order-to' has been bound up with that which is an issue for Dasein, does not signify that a 'world' of Objects which is present-at-hand has been welded together with a subject. It is rather the

phenomenal expression of the fact that the constitution of Dasein, whose totality is now brought out explicitly as ahead- of-itself-in-Being-already-in . . ., is primordially a whole. (Heidegger, 1927/1962, p. 236)

The ontological phenomenologist must speculate about the for-the-sake-of-which cascades that pertain to Dasein. Many examples of this in classroom situations appear for Dasein-Student and Dasein-Teacher in an enquiry into physics teaching (Shaw, 2010).

Finally in this section, it is important to remember that such for-the-sake-of-which cascades are not mental phenomena. In Heideggerian phenomenology the task is to intuit comportment as it appears in itself, without recourse to an mind-body dualism. Theory and practice also are categories within regional ontology that fundamental ontology enables:

Care, as a primordial structural totality, lies 'before' ['vor'] every factical 'attitude' and 'situation' of Dasein, and it does so existentially *a priori*; this means that it always lies in them. So this phenomenon by no means expresses a priority of the 'practical' attitude over the theoretical. When we ascertain something present-at-hand by merely beholding it, this activity has the character of care just as much as does a 'political action' or taking a rest and enjoying oneself. 'Theory' and 'practice' are possibilities of Being for an entity whose Being must be defined as "care". (Heidegger, 1927/1962, p. 238)

The Care Structure along with dynamic for-the-sake-of-which cascades together constitute the equiprimordial formal foundation for ontological pedagogy.

Ontological pedagogy

Heidegger did not peruse for teachers the implications of his ontology. His concise comments on teaching and learning attract attention but they are not an appropriate place to begin the construction of a genuine ontological pedagogy. Enquiries recently have focused on the cultural setting of Heidegger's comments, his 1951 claim that teaching is more difficult than learning, and how his own teaching provides for students insights into philosophical questioning (Ehrmantraut, 2010; Peterson, 2005; Quay, 2012; Riley, 2011; Shaw, 2004). Of the "elsewhere" starting points for the construction of an ontological pedagogy the most promising might be Heidegger's comments on thinking. These are from his later work particularly and some use has already been made of his "tentative typology of conceptions of thinking" in the pursue of styles (concepts?) of reasoning (Peters, 2007). Nevertheless, the present paper maintains that if an ontological pedagogy is to be achieved it must be from within fundamental ontology (including phenomenological enquiries mediated by fundamental ontology).

There are several conclusions – be they extremely tentative, and more of the nature of working hypotheses than real conclusions – to draw from Heidegger on time and the implications of this work for education. These are steps towards an Heideggerian ontological pedagogy. Foremost, it is possible to develop a Heideggerian perspective on the nature of the student. This entails throwing off the scientific view, which in the present paper the work of the psychologist William James exemplifies. Teachers may "see" the student as Dasein-student – being who understands its own being as integral to (constitutive of) world. Dasein-student is not contiguous with *the* world or *in its* world, but Dasein-student and world are the same. With this commitment, teachers then may achieve the second understanding about students. Second, the care "structure" or "complex" describes the character of any student's understanding of the situation, purposes, opportunities, requirements, the past and objects.

Third, Dasein-student only has Dasein-student-now. The past is not the psychologists past, which is something remembered, not even when the psychologist is a constructivist and emphasises the way the mind builds the past. For Dasein-student the past is the *transparent* basis on which everything appears and happens. It does not even make sense to say that *for* Dasein-student the past is the present – such *categories* are always imposed by others (theorists). In the manner of their existence, Dasein-students "push" into the future – this is exclusively their involvement with time always. Yet this involvement is transparent to the student as they are the beings with this *way* of Being.

Forth, teaching is the provision of a potential now for Dasein-student. This assertion requires cautious interpretation. There are several distinct ideas within it. As a first approximation let us say we have two Dasein involved, Dasein-student and Dasein-teacher. The statement is precisely about Dasein-teacher's for-the-sake-of-which cascades. Dasein-student is to be integral to these cascades; they involve Dasein-student as a kind of "object". A Heideggerian phenomenologist would say that for Dasein-teacher the student is ready-to-hand. This is why face-to-face and distance pedagogical practices are very similar in their execution. Dasein-teacher does not encounter Other-Dasein in the practice of teaching. At no time in teaching does Dasein-teacher involves Others-like-itself. Perhaps we should say Object-student instead of Dasein-student, when we consider the student as an involvement integral to Dasein-teacher's for-the-sake of-which cascades.

Fifth, as developed above, all ontic structures, the theories of the psychologist, the physicist and the educational theorist who seeks to establish a pedagogy, are *derived* from the Care Structure. When we seek a theory of pedagogy which is ontological (that is, based upon the Care Structure) we attempt to move from fundamental ontology to ontic structures (concrete theory, objects, categories). The exigent move towards a theory of pedagogy is fundamentally the move to derive categories (in Aristotle's sense, which is sufficiently our common view of concepts and abstractions) from fundamental ontology. The challenge therein is not exclusively that of the educational theorist many have grappled with this progression. There is always the alternative thought, we should contrive to develop an ontological pedagogy within fundamental ontology but how to achieve this eludes the present author. This topic occupied Heidegger a great deal although he was not concerned with the theory of pedagogy but rather the theory of physics and the categories of ordinary life. The Heideggerian theory that is relevant here is that which relates to facticity and schema (Arthur, 2001; Kisiel & Van Buren, 1994; Schalow, 1994)

Sixth, pedagogy in itself is only a characterisation that we (Dasein-theorist) give to particular for-the-sake-of-which cascades. It is through this characterisation that we deem certain people to be teachers. Teaching is not primarily, in its essential nature, an occupational category or an observed human activity. Ontologically, teaching is the "carrying" of for-the-sake-of-which cascades that are pedagogic. The Heideggerian way to proceed with the question of what is pedagogic is to seek to re-appropriate the Greek *paidagogia*.

Seventh, above, mention is made of Dasein-student as ready-to-hand for Dasein-teacher. Although Dasein-teacher's for-the-sake-of-which cascades in the main render Dasein-student invisible, there will be situations in which Dasein-teacher encounters Dasein-student as present-to-hand and thus is "contemplated" as an object with a category. It is through these situations that pedagogy becomes visible to Dasein-teacher. It is through this that Dasein-teacher engages with the normative aspects of pedagogy. *For-the-sake of* ... in the cascade of pedagogy must

include somewhere something akin to the "betterment of the student". In factory models of education, those which characterise modernity, this element may be replaced by something that involves course statistics, which will cause us to question the essence of pedagogy.

Eighth, an ontological teacher would be one who holds sufficient engagement with the phenomenology of Student-Dasein and the Care Structure to facilitate their own rendition of practice without the importation of categories/theories/ideas from the academic literature or staff-room chatter. Nevertheless, the ontological teacher will be involved with ontic structures, although these will be authentic to the situation of Dasein-student and Dasein-teacher.

Conclusion

The present paper is a prolegomena to a theory of pedagogy. Heidegger's concept of time provides the access to the ontological nature of students, and this in turn suggests a theory of pedagogy. A theory of pedagogy – as conceived to the present – is a normative, prescriptive statement. It guides those who teach. There is a leap from a description of the ontological structure of the students to the prescription of pedagogy for those students. This leap is no more alarming than that which the current discipline of psychology entails. The challenge for those who seek a genuine ontological pedagogy is to show how fundamental ontology relates to regional ontology and to our ontic concepts of teaching and learning. Heidegger abandoned such projects after the 1930s, yet they hold an intrigue. The concept of time provides us with guidance to arrive at a description of the student, which in turn may enable the elaboration of a theory or a practice of pedagogy.

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