CHAPTER 1: APPROACHING EDUCATION THROUGH BERGSON

1.1 Introduction

“A perfect action goes hand in hand with pleasure. By pleasure you know you had to act as you did. Do not care at all for those who pride themselves in having labored hard. For if it was hard, they might have as well embarked on something else. The joy one finds is proof of work well-chosen and the genuineness of our pleasure is our most important guiding star” (Gide 1969, p. 32).

In a couple of months from now probably by the time I defend my thesis and am awarded a doctorate, I will be turning thirty years old. Of these thirty years, in retrospect, the last twenty-seven years of my participation in education seem to point me towards a certain spatial rendering of time. This time thus comes to signify a socially sanctioned containment unit of sorts, a physical enclosure in which participants are dedicated to the goddesses and gods of learning. Such is the gravity of this dedication that more than often the occupants of this enclosure are exempt from other activities whose imperative lie beyond the functions of this container. For instance I don’t think my parents would ever try to solicit my attention if they were under the impression that I was studying. But on the other hand if I were playing outdoors or snuggled in the sofa ‘studying’ a work of fiction, they wouldn’t at all hesitate in interrupting me.

This difference in signification is an interesting characteristic of the popular enclosure that we identify today as education and the manner in which such an enclosure disposes the human capacity to learn. In this context, the ‘student’ and the act of ‘studying’ becomes an interesting notion for us to explore the popular and political determination of education as learning. In contemporary society there seems to be no doubt that educational institutions function as the primary location of human learning. Not only are a far greater amount of children than ever before in the history of human beings enrolled in education today, but common sense too would seem to acknowledge as a fact that we all go to schools and colleges to learn.

Now though we speak of participation in education using temporal markers, what is paradoxically revealed is the form of different grades are different spatial locations in an abstract spread of educational space. A space in which each year is characterised in the form a particular classroom and the curricular content that it contains, a box nested among other boxes in a series of linear progression within the larger box that we recognise as the educational apparatus. Now
this restriction and the corresponding supervision that it entails, suggests to us the manner in which the contemporary educational apparatus appropriates human learning and renders it under the category of studying. Thus we find learning, a notion not easy to categorise due to its diverse manifestation in history, across a variety of contexts, dealing with matters both profound and the mundane and unfolding in an unpredictable manner being reduced to a rather limited set of pedagogical practices. Practices that unfold in spaces of formal education and uphold a certain deterministic logic of cause and effect that regulates between the content of curriculum and its reproduction during assessment.

In discussing this popular idea of education, what comes to mind is a certain mechanistic fashion by which educational determination occurs. Under such an orientation, curricular content captured in language seems to serve as the educational stimuli to which students respond with their individual efforts. A metaphor that comes to mind is that of the mirror, the best student under such a rendering of education seems to be the one who is able to reflect perfectly the light that has been incident upon him or her. This state of affairs is normative of educational praxis across the domain from primary to higher education. Educational attainment processed in this manner seems to have for a number of decades now served as the basis by which individuals have pursued vocational success. The paradox though of such a regime of educational praxis on the other hand seems to be that in such a context, the end of self-determination seems to be pursued by the logic of external determination.

In a certain sense what seems to be brushed aside in this context of mass education is the very sense of choice and individuality. The oversight of the logicians of this ‘world view’ of education seems to be that they begin from the universal rather than the particular. Or in other words they seem to frame education and thereby learning as a linear progress, in a space in which all the positions in the educational trajectory are simultaneously given. Yet from the perspective of a student he or she has no view of all the positions except for the one currently occupied. Moreover even progress between two points of the educational trajectory, is not plotted as a linear progress on the educational map, but is instead in consciousness an awareness of the quality of movement against whose background space travelled is rather dimly discernible.

From a Bergsonian perspective, these alternate characterisations reveal two rather distinct ways of thinking of education, the former based on the idea of space and the latter based on the
idea of duration. In order to grasp the former characterisation of education, let us for a moment assume that we are omniscient beings watching the life world experiences of contemporary human beings from a panoptical perspective. A perspective along the lines of humans observing an ant-house, we probably would then be able to clearly identify the manner in which contemporary human societies are segregated. The school is one such institutional form of segregation by which the agency of children are restricted and reduced to the pre-fabricated activities that we discussed above. Moreover having spent twenty-seven years of my life in this educational enclosure, there is a sense of dread about what lies outside this space.

Yet from previous experience this dread is not really about the unfamiliarity of this new space. Rather a sense of foreboding that I’m experiencing seems to arise from the similarity of the form of determination that besets even the vocational world. Besides being paid for services rendered which suggests a certain sense of self-determination, on the other hand I just feel like I am moving from one zone of determination to another. Moreover as a specialist in academics this new box seems to be even more restrictive than the previous one, a feeling similar to the experience that we feel when we move from school to college in virtue of the specialisation that we have chosen. In the Indian context we find this segregation in terms of admission to professional courses in which the general population of a graduating batch of high school students are sorted on the basis of their performance in the nationally standardised examinations.

This seems to be the manner in which educational practices segregate individuals into different categories such as doctors, engineers, businessmen, scientists, architects, designers, writers, nurses, sports persons, administrators and so on. Moreover each of these disciplinary clusters seems to function in isolation from one another even if they are a part of the same university. Carried over into the realm of vocational progress and in its association with financial remuneration such practices also seem to contribute to even larger schemes of segregation as characterised by the increasing emergence of gated communities. Educational failures and drop outs which in the Indian contexts amounts roughly to around fifty per cent at the high school level and ever higher at the university level thus find themselves barred from those very spaces that are characterised as the promised lands of modern societies.

Above and beyond the political character of this educational segregation, the focus of this thesis is the manner in which the popular idea of time as an abstract and objective entity functions
as nothing but an abstract space. In a certain sense we can see parallels between modern educational and agricultural practices in terms of the standardised fields that are manifested for such practices. Educational and agricultural fields considered as abstract spaces make possible the mass cultivation of mono cultures in isolation from one another. We no longer seem to find these fields as breeding grounds of diversity, fields that promote the growth of more than one crop or type of individual. Rather we different crops and different individuals grown in different spatially segregated fields in which all other types of plants or individuals are systematically weeded out.

What makes things worse is the manner in which the notion of quantity seems to have pervaded over all notions of quality. Like the farmer who is now only focussed on the number of kilos he can harvest, schools too seem interested in the quantity of their produce in terms of the number of rank holders, passing rate etc. The underlying logic of educational causality by which the quality and quantity of the curricular content takes precedence over the student seems to be endemic to modern agricultural practices as well. Thus we find that the focus towards the careful tending of plants, today supplanted by a pre-occupation with the quality and quantity of pesticides and fertilisers that are required for a bumper harvest. As a result not only do we find the market saturated with engorged agricultural produce but we also find it saturated with similarly engorged educational produce. The overt educational focus solely on matters of the intellect has in this sense contributed to the development of a disproportionate intellect amongst a small yet successful section of contemporary society.

This context of overt determination in education as well as other aspects of the modern life thus constitutes our discussion of freewill and the role of self-determination in modern societies. The question of time then serves as the backdrop of our investigation, especially in the manner in which Bergson conceptualises how objective time as an organising principle serves as nothing more than abstract space. Parallel to our exploration of abstract space is the idea of subjective time as duration and the alternate manner in which it frames the idea of progress and succession. The goal is to place significance upon individual students as the starting point of educational practices and to imagine their progress and development in a dynamic manner without projecting their educational present and future in a functional manner upon an abstract space. A significant start in this direction would be to consider the affective or emotional aspects of education and learning which are either ignored or misrepresented by their very projection upon abstract space. But to do
so we shall first dwell upon the thoughts of the French philosopher Henri Bergson who provides
us with interesting concepts to explore the development of contemporary societies.

1.2 Education: A world view or a way of life
World view and way of life, if we were to heed Bergson, seems to be the manner in which
homogenous multiplicity or extensity and heterogeneous multiplicity or intensity proceeds.
Homogenous multiplicity or extensity seems to be compatible with the notion of a 'world view' in
the sense that it underscores the unique human capacity to spatialise while heterogeneous
multiplicity or intensity seems to be compatible with a 'way of life' as it underscores the notion of
the human capacity to endure. If we are to believe Bergson when he claims that what we know as
time results from nothing but a confused distinction through which we impose space upon duration
then it seems that what we broadly know as education also proceeds by imposing the extensive
upon the intensive, a 'world view' upon a 'way of life'.

The notion of a 'world view', quite simply proceeds from the manner in which we see the
world, which seems as it were to lie outside of us. From a Bergsonian perspective, 'world view'
thus seems to characterize our human ability to spatialise, the diverse ways in which human beings
can represent numbers, words, images, sounds and render them extensive in space. From an
educational perspective, we shall then approach this ability or capacity both in the manner in which
it manifests within educational praxis as well as from the perspective of its overall impact. The
former can be approached through the qualitatively different tones by which Bergson treats
different forms of spatialisation. For instance between how the disciplines of Science and Art,
infatuated as they are with the extensive and intensive respectively, reveal different prerogatives
in their treatment of quantity and quality. The latter explores the implications of this ability to
spatialise upon the manner in which the foremost social institution of contemporary society is
imagined. Or in other words, by what means has the human capacity to learn come to be
represented and ordered in space? Is learning as education, an art or a science, does it proceed as
a 'world view' or a 'way of life'?

This is the context from which we shall approach Bergson's philosophy of space and time
and explore the concept of the human as one who measures. An engagement that albeit briefly
traces the historical development of the human capacity to measure and the implication of this
capacity for humans themselves. In the second part of his Book *Human, All Too Human*, Nietzsche
claims that the term 'man' in itself translates as 'one who measures'. A self-identification that Nietzsche attributes to is the tremendous inner excitement with which primeval humans seem to have acknowledged their encounter with measure and its various means. A development that not only led humans to refer to themselves as one's who measure but also a development by which we ascended to another realm that when we started out didn’t seem as immeasurable or weighable as one may feel so today (Nietzsche 1996, p. 310).

In a certain sense, Nietzsche's opinion of measurement seems to be related to Bergson's treatment of intensity and extensity, with the former not reducible to the popular means of measure that caters to and characterizes the latter. Yet, we find at large, academic disciplines that concern themselves with human affairs still subscribing, to such mechanical and mathematical models of measure. Or rather, such a model of measure has, as an approach, proliferated into almost all disciplines of inquiry. Establishing what one can call a particular regime of quantification or spatialisation that inaugurates the specific subjectivity of contemporary society. Nietzsche’s thought is in this sense complimentary to that of Bergson in that, though we have made great progress in our techniques of spatialisation, especially through the introduction of differentials to almost all fields of scientific inquiry, there still remains the question of our inner lives, of heterogeneity and quality, of matters that tend to get distorted when grounded in space.

In the very first chapter of his book, *Time and Freewill* we see Bergson explicitly take on the discipline of psycho-physics for the manner in which it frames sensations and emotional states in extensive terms such as intensity and magnitude. One finds that this tendency pervades even our everyday use of language, for example, when we call a sensation as being larger or smaller than another. The philosophical question that Bergson raises here is of the relationship between the 'container and the contained'. For he questions the logic by which we claim a particular feeling or sensation to contain a smaller feeling or sensation, as though they are extensive in the manner that numbers are. Bergson claims that the divisibility of the extended is the reason for its measure and that such an approach is not feasible in the case of intensities, which he claims, are un-extended. The matter at issue here is that of the nature of measurement and the manner in which the extensive is co-related to the intensive (Bergson 2001, p. 2).

Interestingly, we find contemporary educational praxis play handmaiden both to a mechanical rendering of time as well as to the physical sciences that facilitate such an approach to
the world. No wonder we most often find the idea of quality in education reduced to its extensive aspects, as text books that frame curriculum and evaluative practices that provide us with learning outcomes. Moreover even though there is adequate mention of improving pedagogy and teacher quality, such policies seem rhetorical given the precedence of the statistics of learning outcomes that written examinations generate. Such a rendering of quality is but a symptom of the larger trend of spatialisation both in education and society. For the educational time-table seems to be nothing but its manifestation in space of an abstract regime of classroom engagement in which number of hours signify a certain quantity of content across disciplines. Not only is education rendered as a quantitative progress marked by an increase in the capacity to master, retain and reproduce various kinds of information but it also rather casually dismisses the qualitative characterization of individuals and juxtaposes our emotional states against a background of extensive progress. Such a rendering of learning seems to ignore what Bergson refers to as a nascent sense of freedom, of the intermediate affective sensations that arises between sensations and corresponding state of consciousness (ibid, p. 35).

A significant factor in approaching education in this manner ironically is the notion of accountability in education. An accountability guaranteed by a universal consistency of educational content, pedagogical methods and evaluative practices that reduce the heterogeneous multiplicity of our conscious states to a number of discrete acts configured in abstract space. A rendering in which the report card or progress reduces the heterogeneity of individuality to a cursory mention of their names, age, sex and other educational characteristics in the form of a series of abstract numbers. This is the manner in which educational praxis orders itself in terms of an image composed of prefigured units that characterize educational space. A space that is privy to the reproduction of information without paying attention to the qualitative changes brought about in individuals by the imposition of such a regime of reproduction.

If we are then to characterize the experience of education from a qualitative perspective, then educational progress seems to occur gradually, permeating a larger number of psychic elements of the child’s inner life and not limited to the mechanical accumulation of this or that particular skill. Such a qualitative approach suggests that experiences at school, by gradually adding its own flavor to the whole personality of the child, reaches a state where it transforms the manner in which the child approaches the world and its objects. Such a rendering will then
acknowledge the alien and isolated character of education from the inner life of a child, as suggested by his or her early experience of the kindergarten.

Now only when we consider education as a 'way of life', can we acknowledge the manner in which it can lay claim on a child and alter the shade of his or her numerous perceptions or memories and yet itself not come into view as a distinct entity. From a Bergsonian perspective then education would be an on-going process and not a pre-established state or spatialisation that represents progress in terms of magnitudes. Rather educational progress would seem to manifest as gradual alterations in distinct physic states that co-exist in a confused unity. Although a difficult task in an age characteristic of techniques that present education as a product that can be bought in the educational market, we must thereby urge ourselves to imagine education without the pre-figured units with which both contemporary practitioners, policy makers and states dabble with today. For education as 'way of life' is not an itinerary of things “which are easily expressed in words, and in things with well-defined outlines, like those which are perceived in space” (ibid, p. 9).

1.3 Educational slippage: The notions of intensity and extensity
At the core of our exploration here is a certain technique of juxtaposition that characterizes contemporary society, which for Bergson is the manifestation of time as space. In other words, Bergson seems to be directing our attention to the temporal fabric within which the contemporary experiences of human beings unfold. A fabric in which all beings are simultaneously gathered, by placing them side by side in what is conceived as the linear progress of objective time. We will now explore the inconsistencies of such juxtaposition and the kind of determinism imposed on the individual, which aided by common sense associates the intensive with the extensive, reflecting a difference between the reflective consciousness and the data of consciousness. This is why for example, unless informed or paying close attention, most humans seem to be unaware of the qualitative changes of hue and color that are incident upon a surface as the distance or intensity of a luminous source varies. Most humans on the other hand seem to be under the impression that objects have their own peculiar color, definite and invariable. Given this proclivity of common sense towards interpreting qualitative changes as quantitative ones, we most often seem to deny the qualitative impression of changing hue and color in our consciousness and instead subscribe to a quantitative interpretation of the changes in the sensation of luminous intensity, proposed by
the collusion of past experiences and the prevalent scientifically inclined modes of understanding (ibid, p. 51).

The discipline of psycho-physics provides us with a suitable example in their attempt to measure intensities in our experience of luminosity by imposing on consciousness a quantitative interpretation that binds the intensive to the extensive. An imposition that we find in an experiment measuring luminosity, in which two colours of the spectrum are used to produce white light, while keeping the proportion between the two colours constant and increasing and decreasing the intensities. This experiment would tend to suggest that the color of the resultant white remained the same while changes occurred in our sensation of its intensity. However from the perspective revealed by the data of consciousness, intensity is revealed in the form of different hues of an object that appear alongside the successive progression of different degrees of luminosity. Thus while different degrees of luminosity as real quantities require a photometer for their measure, such an enumeration eludes our consciousness which perceives luminosity as a pure quality. For Bergson, the matter of concern in such photometric experiments is not their results or values, but their interpretation.

Let us take the example of another experiment in which a sheet of paper that is illuminated by a number of uniform light sources is closely observed as the source is successively turned off one after the other. Bergson rejects the claim that the color of the sheet remained constant while differing sensations are attributed to diminishing intensity of the source. Instead he relates the successive sensations of change to layers of shadow that are cast upon the sheet of paper as the sources are turned off one after another. Bergson argues that for consciousness the shadow is real, even though past experience and physical theories may posit black as absence. Thus each successive change reflects a qualitative difference, as though a new shade of white emerged on the sheet at each stage. The crucial point is that a change in sensation as reflected upon consciousness does not necessarily have to coincide with the corresponding change in the external source. This is because the illumination of a white surface can to a certain extent remain constant in the face of external change until the change is sufficient enough for a new quality to emerge (ibid, p. 54).

For Bergson, in such tests only one sensation is used as an intermediary to equate different luminous sources or physical quantities. Moreover they are not psychological in that they do not attempt to compare different sensations and the sensation itself remains an unknown quantity that
is mathematically embedded. Despite this, psychophysicists employ a number of different methods in what they claim to be the study and measure of the sensation of light itself. One such experiment contrasts three different luminosities A, B and C, each of which can be manipulated at will by an increase or decrease of luminosity in uniform measures. The attempt is to establish between the contrasts AB and BC, proof of the two different sensations being equal without being identical as well as to establish the possibility of measuring a sensation by another.

In response to such a psycho-physical scheme of measurement, Bergson reveals the gap that exists between the continuity of the extensive cause and the corresponding sensations. For unlike an extensive cause that expresses a successive and progressive increase from a degree of luminosity to another, the data of consciousness reveals a discontinuity in the movement from one color to another. Moreover, though it is possible to establish a fixed number of intermediate shades between colors, there is no certainty whether this gap that we jump across is a magnitude or for that matter an equal magnitude. Thus while the task of establishing a contrast of a shade of grey as equidistant from two other such shades seems analogous to such an identification among the colors of the spectrum as experienced by consciousness. A significant difference remains in that our experience of successive grey tints involves a progression in illumination, which aided by our imagination and our memory associates differences in brightness with magnitude, an association that we do not seem to make in case of differences in color (ibid, p. 59).

Bergson thus reveals a radical discontinuity in applying means that render the physical world in the form of extensive quantities to intensive qualities that characterizes human life. His insight suggests of a certain slippage between standardized external luminous sources and the quality of the experience of luminosity. Now if we for a moment return to the two notions of education we discussed earlier as 'world view' and 'way of life' we find that the former, in virtue of the law of association, renders individuals as homogenous quantities while the latter renders them as heterogeneous qualities. A confusion that ensues when time, a quantitative homogeneity, parts of which are distinct yet identical and infinitely divisible is imposed upon individuals who are constituted by seemingly inseparable parts, of feelings and states of consciousness that melt into one another other instead of maintaining distinct boundaries as characterised by their representation in space.
Bergson contends that such psycho-physical interpretations are merely convenient for they still need to indicate how the intermediaries used throughout as indices of measure exist in the object measured as well as establish the equal status of elementary contrasts which only seem to be successive. Besides this, the quantitative enumeration of the number of intermediate shades between two tints of grey has experimentally been proved to be a rough estimate that varies subjectively. Bergson claims that hiding behind such an experimental result is a hidden theoretical postulate that quantifies qualitative change by relating such changes to an objective external cause whose increase coincides with the increase in physical stimulation.

What this series of experiments measuring the intensity of luminosity thus reveals as the single sensation that serves as the intermediary. That unknown quantity which is mathematically embedded and avoids comparing different sensations, seen in the context of education is nothing but a spatialisation wrought by language and rendered under the auspices of abstract time. Educational praxis is thus revealed as a sort of imposition of the extensive on the intensive facilitated by an abstract quantity unknown to consciousness. This is the manner in which an abstract amount of content by occupying a certain number of pages in a book comes to occupy a certain amount of class time. This logic is what leads to even the quality of a written assessment to be measured using quantitative factors.

At play is a certain mechanical orientation in which the act of spatialisation is facilitated by language which plays the role of the standardized extensive source. A source that acting like a stimuli progressively imposes pre-figured quantities of curriculum upon individual students across their entire educational trajectory. More importantly we also find such a rendering of education frame progress numerically along straight line, in which each number represents a grade from which we progress annually on the basis of the results of written evaluations. Yet progression in one order of succession need not necessarily coincide with progression in the other as each individual student is in a certain sense composed not by a substratum of homogeneity but rather by a qualitative heterogeneity that disposes each individual in different ways at each point of the curriculum framed by an arbitrary time table.

This is the manner in which contemporary educational praxis seems to be at odds with individual quality which we shall associate with a ‘way of life’. A rendering of education which is sensitive to the changing disposition of individuals which reveals at every point a new direction,
in a certain sense of pre-figuration in which the future is revealed in the present. Educational praxis as a ‘world view’ seems to cohere more with the straight line, movement along which is characterized by a jerky action that does not announce what is to follow thus revealing a sense of self-sufficiency. In crafting education both as a ‘way of life’ and a ‘world view’, we thus recognize two distinct ways in which one can characterize education from an Bergsonian perspective either in the form of mechanism or dynamism (ibid, p.140).

1.4 Common sense and the relation of intensity to extensity

Thus far, while we have briefly interpreted the lack of co-incidence between the intensive and the extensive and its implications for educational praxis we still find contemporary society rife with such an association both at the level of scientific progress as well as common sense. In this section, we shall explore Bergson’s thought pertaining to the manner in which common sense carries out such an association by localizing consciousness in space and quantifying the successive development of phenomena in terms of magnitude. A quantification that draws upon observations that suggest an increase vis a vis the affected surface or in other words by an increase in the number of peripheral sensations accompanied by a qualitative change in some of them.

Take for example, the case of any person engaged in the act of lifting heavier and heavier quantities at the local gym. Common sense would incline this individual to record an increase in effort localized at the arm with which he or she is lifting the weight, based as it were on the movements he or she is conscious of. But in reality, only the arms undergo the qualitative changes of fatigue and pain that suggests an increase in effort. Yet close attention to consciousness reveals that in reality, muscular contraction spreads all over his or her body. Thus we find a similarity between the progression in intensity of both superficial effort and deep-seated feelings, as a qualitative progress of increasing complexity that is only indistinctly perceived. We are also introduced to the manner in which common sense confuses consciousness in virtue of thinking in space and representing thoughts in words, localizing effort to a single point thereby allowing for a quantification of increase in magnitude while ignoring qualitative changes (ibid, p. 26).

In the case of intermediate states existing between the superficial and deep-seated states, we find a distinction made between states that are coordinated by speculative and practical ideas. The speculative idea is accompanied by attention or intellectual effort and the practical idea is accompanied by acute or violent emotions that accompany the latter. Quoting the studies of
Fechner and Ribot, Bergson argues that though accompanied by visible movements such as the contraction and expansion of the scalp while attempting to remember or the open mouth or pouted lips that accompany the act of paying attention, such movements aren’t the cause or effect of thinking or paying attention but rather are a part of the phenomena in the sense that they reflect it in space (ibid, p. 27).

Even in cases when such activities seem to be purely psychical, Bergson claims a close observation to reveal a sense of increase in immaterial effort such as a growing tension of the soul. This feeling can be narrowed down to a feeling of muscular contraction that either spreads over a larger surface or induces qualitative changes along the lines of pressure, fatigue and pain. Rage is in this fashion accompanied by increased heart rate and breathing, a pale face, quivering nostrils, change in voice, clenched teeth and even trembling. Thus emotions such as desire, anger and hatred seem physiologically similar to intellectual effort or paying attention except that the former is coordinated by the unreflective idea of acting while the latter is coordinated by the reflective idea of knowing. But it is important to note that none of these feelings can be reducible to the sum of organic sensations they induce by providing a common direction to diverse movements (ibid, p. 29).

For Bergson, the growing intensity of such a feeling is nothing but a deeper and deeper disturbance in the organism; yet there exists an irreducible psychical element which can be revealed in cases where we choose to hide the physical symptoms of our feelings. Suppression of our emotion in such a manner often replaces the intense state of a feeling with an idea of the feeling, its intellectual representation. In this sense there seems to be no big difference between deep-seated emotions and violent and reflective emotions as peripheral sensations can be replaced by inner states depending on the direction they take, inward or outward. But what is important is that “…the intensity of these feelings always consist in the multiplicity of simple states which consciousness dimly discerns in them” (ibid, p. 31).

The measure of the in-extensive and indivisible intensity of simple sensations leads us to question what such a measure consists in. To do so Bergson acknowledges the affective element that most often accompanies simple sensations, but urges us to treat them separately to begin with. Most often, common sense relates the intensity of a sensation to an external cause by acknowledging organic disturbances as echoes of their outward cause, a retrospective action by
which a sense of magnitude is drawn upon the basis of the corresponding physical impression. But Bergson contends that this is not the case presented before our immediate consciousness. For a disturbance appears before consciousness as a sensation and not motion, and thereby cannot transmit to the sensation any sense of physical magnitude as consciousness does not catch a simple sensation in the form of molecular movement (ibid, p. 33).

Such a claim suggests of an orientation towards the future rather than towards the past or present stimuli and reveals the role of affective sensations as intermediate agents that reveal what Bergson calls nascent freedom. This intermediate affective sensation, a process of sketching or prefiguring occurs simultaneous with the experience of the sensation and makes a distinction between automatic and free movements, in virtue of providing alternatives to automatic reaction. Thus the relation between a physical sensation and its corresponding state of consciousness is that the latter serves more as an indicator of a future reaction than a psychic translation of the former as common sense would have us believe. Such an outcome suggests the inability of consciousness to perceive a physical sensation in terms of the molecular movements that translate them. Rather what is revealed to consciousness is an affective sensation that accompanies the involuntary movements that tend to follow stimuli. This affective sensation is what distinguishes us as conscious beings rather than mere automata (ibid, p. 35).

What is revealed is that the progression of the intensity of a state of consciousness as in the case of physical pain does not proceed in the manner of numerical and extensive progression from lesser to more. They rather proceed like a musical symphony in the sense that as the pain increases, a larger number of sensations, muscular contractions and organic movements are brought within its influence. Bergson supports this claim on the character of an increasing intensity of a sensation with Richet's description of disgust and Darwin's description of pain. He concludes by asking if we can really assess intensities based entirely on differences in sensation. This is because without the more or less extended reactions that accompany a sensation, its intensity would rather be a quality than a magnitude (ibid, p. 37).

An alternative case is made vis a vis the comparison of several pleasures, the greater of which is defined by the quality of one's preference. The disposition of our organs as our body inclines towards water, for example when both water and cola are offered, serves to characterize our preference. An inclination that for Bergson grows from little movements in the concerned
organ until it eclipses the whole body and defines the movement but does not produce it. The real movement here is not a metaphor but is characterized by bodily inclination, the almost reflexive manner in which one picks up the water ignoring the glass of cola. This movement or attraction can indeed be checked, but once immersed in its object, it reflects the inertia of the organism as the keenness of pleasure which rejects or restricts of every other sensation. Inertia rendered as resistance to other distractions thus makes for a possible magnitude of pleasure which otherwise would remain merely a state (ibid, p. 38).

For Bergson another manner in which common sense intervenes in our association of intensity with extensity emerges from the affective character of some representative sensations. Thus our representative sensations of taste, smell and temperature are often accompanied by a pleasant or unpleasant feeling. This latter affective character that incites extensive movements of reaction is often the reason why qualitative differences, say in the different shades of bitterness is characterized as differences in the quantity. Moreover even purely representative sensations do seem to function in this manner when their external cause seems to exceed a particular threshold. As in the case of distant sounds, dim lights or faint odors that in virtue of soliciting our attention establish such sensations as slight intensities. For example the close proximity of an exploding cracker, in providing us with a sensation that overpowers and incites in us a sense of loss of personality establishes such sensation as an extreme intensity (ibid, p. 40).

Even in the case of medium intensity representative sensations we find that often we refer to their intensities vis a vis previous experience of other extensive sensations that they overpower or resist against. Such a comparative approach is the reason why the speech of foreigners or the ticking of a clock at night seem louder than we normally expect against a consciousness seemingly devoid of other sensations and ideas. This comparative approach in the measure of intensities tends to get carried over even in the case of representative sensations which are not accompanied by any observable affective reaction acting as a source of comparison. Thus while a dynamometer can gauge a change in muscular force accompanying such sensations, such an increase does not seem to be represented in our consciousness and requires some other element for us to come up with an estimate (ibid, p. 41).

Let us consider the perception of a sensation in consciousness which is accompanied by an affective character or reaction that fades away. What we are left behind with even if we no longer
perceive it, is the thought of the cause, an extensive and measurable object, a certain quantity of
cause which common sense then associates to a certain quality of effect. This unique capacity of
association between sensations and their external images in space is what Bergson likens to an
acquired perception. Formed at the inception of consciousness and lasting over the lifetime on an
individual, this co-relation between shade of sensation and amount of stimulation is a constant
human experience. An experience likened to an acquired perception in virtue by which the latter
transfers ideas into sensations, binding quantity of cause to quality of effect and transforming the
shade or quality of a sensation into a magnitude of intensity (ibid, p. 42).

This seems to be the manner in which common sense orients an individual who uses a pin
in his right hand to prick his left hand more and more deeply imagines the sensation to be
progressively increasing in intensity. For it seems as though unknowingly there is a tendency in us
to introduce the cause into the effect, which in this case occurs as we identify in the left hand the
progressive effort of the right hand which pricks. An analysis of the data consciousness on the
other hand would suggest a variety of sensations of the same species that are qualitatively different:
starting with a tickling feeling as the pin grazes the skin, to the actual feeling of a prick and finally
to the pain successively bringing an increasing surface area of the body under its influence (ibid,
p. 43).

Like other representative sensations, the measure of sound also seems to proceed by a
comparative logic based on the effort required to produce a similar sound. This seems to be the
manner in which common sense disposes physiological, extensive elements to support the
formation of the units that measure sound. Thus the effort to raise and lower our voice that
accentuates a gradation of effort in the vocal cord and the discontinuity we experience while
vocally reproducing each musical note alongside the manner in which different notes produce
resonances in different regions as diverse as the head and the thorax demonstrate the physiological
basis that supports a spatial conception of sound in terms of a successive series marked by empty
intervals. This is the manner in which different notes in their vocal manifestation, originating at
different regions of the body seemingly supports its measure in the form of a vertical spatialisation,
which in turn corresponds to a definite measure of tension experienced in the vocal cord and a
definite surface area of the body involved in its production. Thus while physics corroborates notes
produced by a certain muscular effort in terms of a precise number of vibrations, the experience
of sound from the perspective of consciousness would remain purely qualitative in the absence of these factors (ibid, p. 46).

Our sensation of temperature endorses distinctions both of degree and nature, the latter evident by the fact that different points in the surface of the body seem differently inclined to heat and cold. Moreover sensations of heat and cold tend quickly towards affective reactions that serve to relate the sensation to their external cause, endorsing quantitative differences between different sensations. A careful examination of the cause of our sensations, both from past experience and from the sensation itself should for Bergson reveal “...that the magnitude of a representative sensation depends on the cause having been put into the effect, while the intensity of the affective element depends on the more or less important reactions which prolong the external simulations and find their way into the sensation itself” (ibid, p. 47).

Bergson’s analysis of the sensation of pressure in the form of weight continues with his analysis of revealing how we seem to quantify even our experiences of heaviness and lightness. The direct manner in which the body extends itself in such operations suggests the immediacy with which the force of a pressure is linked to its external cause. Often such a measure is conceived as a homogenous movement in a homogenous space as revealed for example in the experience of lifting something imagined as heavy. Our imagination, drawing from previous experience helps in making an association with the object which manifests in our bodies as a pre-determined amount of effort required for the task. But when the weight turns out to be lighter than expected, the effort we extend through our muscles seem to experience a loss of balance, one caused by the mismatch between the effort we had imagined and manifested and effort that was required. This is an indication that movement and weight are distinctions of the reflective consciousness while the data of consciousness reveals only the locale and intensity of a series of muscular sensations (ibid, p. 50).

Among the many findings we recognize as important in this section from an educational point of view, the proclivity of common sense to impose cause upon effect and the tendency of common sense to orient itself towards past experience seem to be very significant. We have also encountered the manner in which consciousness orients itself towards the future vis a vis intermediate affective sensations that prefigures future actions that reveal us to be something beyond mere automata. Moreover the case of intermediate sensations also reveals to us the
dynamics of past experiences in the determination of intensity, a characteristic that Bergson terms as acquired perception that serves as the building block of our imagination.

An interesting exercise for us now would be to approach educational praxis from the perspective of sensations and their intensities. Now if we consider written examinations as the most commonly accepted form of measuring the quality of educational praxis, we find a rendering of intensity in extensive terms that serves to measure or assess educational praxis. This leads us to question the very nature of the sensations involved in educational praxis: are they simple sensations that can be represented by their external cause, are they intermediate sensations that are accompanied by an affective element or are they sensations of pure quality that do not offer us any extensive form of measure? The educational 'world view' with its pre-fabricated form and content seems to ignore such nuances and proceed with the matter in a purely extensive terms.

The discussion so far between the measure of intensive states using extensive terms, the role of common sense and past experience in introducing the cause into the effect alongside the alternative method of comparing different intensities to measure them, offers us some interesting insights into educational praxis. To begin with it raises the question as to whether written examinations do provide us with a measure of the quality of educational intensity. Or is it a mere process of reproduction by which the extensive cause or the curricular content is reproduced in its original form as the effect. If this is the case then educational praxis seems merely to be dealing with the reproduction of standardized extensive content and reveals nothing of its intensive manifestation as characterised by the consciousness of individual students.

But on the other hand if we consider as Bergson does the role of the intermediate affective sensation between cause and effect that provides alternatives to automatic reaction, then we need to consider this sensation as an indication of future reaction rather than the psychic translation of the past stimuli. In this context the intensity of a sensation does not reveal itself in its external cause but rather reverses the cause effect relation we have seen common sense establish to register itself as the cause of this or that future response rather than as an effect. Such a rendering of the measurement of intensity suggests it to be something that cannot be related to the extensive cause of the curricular content but rather as something revealed in the manner in which one’s preference works. Thus the intensity of an educational sensation, if we may call it that, seems rather to derive
from the inclination with which it draws a student to the point that it restricts or rejects every other sensation.

Discussing educational praxis in this manner we come back to distinctions made in the introduction of this thesis between the notions of ‘studying’ and ‘learning’ and the manner in which contemporary educational praxis seems to appropriate the latter in terms of the former. A form of appropriation that we can now acknowledge under the title of an acquired perception, carried off with the aid of common sense and drawing associations between sensations and their external images in space, between the sensation of ‘learning’ and the image of ‘studying’ thus associating the quantity of an educational cause with the quality of its effect. A notion of learning based on the subjective experience of duration on the other hand seems to place at its foundation the preference or inclination of the individual student, its intensity drawing as it were from the very depths of the individual. The experimental school of Summerhill in Suffolk, England provides with a rather delightful example of education pursued on the basis of individual preferences and self-determination.¹

Interestingly in contrast to the manner in which schools like Summerhill pursue the goal of education, the popular pursuit of mass education seems to bring into focus what the sociologist of education Basil Bernstein describes as the expressive and instrumental orders in education. The first chapter of his book *Class, Codes and Control Volume III: Towards a Theory of Educational Transmission* which sketches these concepts of the expressive and instrumental order in education reveal to us two different complexes of behavior and activities within educational praxis. An expressive order associated with notions of conduct, character and mannerism and an instrumental order which is associated with acquisition of specific skills.

Speaking of popular education in England, Bernstein claims that the relations between these two orders are often a source of tension both among teachers and students. A tension characterised by the divisive character of the examination minded instrumental order which imposes sharp distinctions between the ability of students ability and limits the development of specific skills to a small number of them. In other words such a conflict seems to reflect some sort of confusion between the tangible and intangible aspects of popular education. A state of affairs

¹For a qualitative approach to Education see Neill (2012).
that seems to ensue from the very intangibility of the notions of character, conduct and mannerism and yet this seems to be the very reason why contemporary educational praxis has increasingly come to focus only upon the tangible aspects. A predominance that Bernstein attributes to an instrumental prerogative in English schools which then imposes a divisive social organisation, one that disrupts the attempts of the expressive order to bind the whole school together as a distinct moral collectivity.2

From a Bergsonian perspective we thus find within popular education two aspects of educational praxis, one from the instrumental order which seems interested purely in aspects that are captured in space and therefore extensive and the other from the expressive order which seems interested purely in aspects that are intensive and hence distorted by helplessly relying on extensive terms to do so. Let us begin by dealing with the instrumental order which seems to subscribe to the popular idea of education as revealed by common sense, one that approaches the intensity of sensations in association with their extensive causes. A particular style of rendering education that in virtue of their single minded focus on a pre-fabricated curriculum of content and skills, subscribe to a measure of magnitude or intensity solely on the basis of the reproduction of this content or skills during assessment.

This trend of rendering intensities vis a vis extensive terms has over time strengthened its position within education given the confusion surrounding the expressive order which by nature seems to evade an extensive form. For example, even music education seems to be affected by the pre-fabricated or 'world view' approach of educational praxis. In this context, common between music and other disciplines is the standardization of the measure of achievement which in turn raises questions pertaining to both pupil and process. For such a tendency disposes both curricula and humans as instruments, tools, products or things that serve the improvement of business and industry. As a market philosophy, an ends-means approach based on the worries and strains surrounding income and the prerogative to control the results of production suggests not only a greater importance of economists over educationalists, but is also detrimental to the ideas of musical experience and personal expression. For then the activity of pedagogy is then reduced merely to a collection of techniques or methods.3

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2 For more on the instrumental and expressive code in education see p. 40, Bernstein (2003).
3 For more on instrumentalism in music education see Varkoy (2007).
Drawing upon Skjervheim's distinction between naturalistic-positivistic-pragmatic and phenomenological-existential thinking, Varkoy (2007) describes the manner in which the experimental approach of the former associated with natural science imposes upon the latter which is associated with the human sciences. Objectivism thus reduces human beings with intentional consciousness, will and belief to the level of other observable natural phenomena such as behavior and brain function. A tendency characteristic of behavioral psychology that reduces the status of a human being to that of a thing and overlooks other aspects such as human transcendence, understanding, truth knowledge and insight. Philosophically Varkoy is surprised that educators call themselves humanists in a political climate, rife with non-humanistic tendencies and instrumental approaches to thinking. Varkoy asks if we can still continue to call ourselves humanists, can those developing standardized tests for music make a claim upon assumptions on the basic constitution of human beings, upon the very disposition of individuals.\(^4\)

The concept in focus in this context is of the individual not reducible to stimulus and response, urges and needs, who is neither a mere product of the social and economic environment. Pursued is a multidimensionality that acknowledges an individual’s biological and sociological basis alongside the extraordinary place and function of individuals as self-conscious, reflective beings capable of an active personal responsibility. This is the background against which Varkoy posits two philosophical pedagogical approaches of pedagogy as a technical science engaged solely with method or pedagogy as an art. This is a dichotomy apparent in Plato's approach to art as inspiration and Aristotle's approach to art as technique.\(^5\)

Now when we consider the description given above of humans as reflective beings with a sense of personal responsibility, we are reminded of Bergson's description of the intermediary affective sensation that impinges on consciousness at the same time as the extensive stimuli. In the context of education, this affective sensation seems to reveal to us a nascent sense of freedom. A subjective orientation towards educational praxis, one in which alternatives exist and individuals are characterised not as abstractly inclined or disposed towards education. An approach to education and the educated much unlike the common sense rendering that associates a simple sensation to an extensive stimuli. But rather an approach that considers this emergent character,
the very sensation that characterizes our individuality, the intensive states that capture a whole range of our emotional dispositions. Now when we acknowledge in the context of education, this form of association between a sensation and its external stimuli, it reveals the former not as contingent upon the latter which is in the past but rather contingent upon the future.

In other words this reveals, once again, a mechanical understanding of the notion of popular education that is supported by common sense. One that like the simple sensations we saw Bergson discuss, associates the intensity or magnitude of education with its extensive cause which is the curricular content. What such a rendering leaves out exactly is the manner in which the reproduction of such content disposes an individual in the future. Though paradoxically this is exactly what in a certain sense popular education ensures in associating examination scores with vocational futures. The popular notion of education thus aided by common sense does just this in associating positive vocational and educational opportunities with educational performance characterised as a quantity. This regime of educational quantification representing educational qualification by associating a sensation with its extensive cause thus refuses to acknowledge the individuality of each student as being composed of unique heterogeneous qualities and by its imposition facilitates a massive standardization of human nature as well as experience.

In a certain sense the motive of this section is not about offering an alternate spatialisation of education, but to make issue of the very act of educational spatialisation. For such a rendering of the humanistic discipline of education reveals behind institutional policy and praxis the application of a deterministic logic, one that derives its primacy from its successful yet in a certain sense catastrophic application to the physical world of extended objects. This mastery of space as demonstrated by the modern disciplines of mathematics and physics, which in spawning the discipline of psycho-physics reveals to us the essentially deterministic manner in which such a logic has come to bear upon and even transform and solidify human individuality in certain characteristic ways.

The praxis of one of the premier social institutes in contemporary society, namely educational institutes thus suggests to us the manner in which individual progress is framed not in terms of a gradual qualitative change in consciousness but rather as a linear, successive quantitative progression by each student in abstract educational space. In the form of pre-determined positions simultaneously spread out in homogenous space which qualifies individuals on the basis of abstract
quantities such as marks and grades. Popular education today characterises education spatially in terms of where one has reached in the educational trajectory that is stretched out under the auspices of educational time. This rendering of individual attainment tells us nothing much about them and ignores individual dispositions as well as the very motion by which they have come to occupy a particular position in educational space. This is the manner in which the statistical rendering of individual students, a crucial resource in educational policy and planning for schools, national and international educational administrators thus reduces human potentiality from their existence as qualitative multiplicities to a mere symbolic representation. They tell us nothing of the character of a person, for instance about their disposition towards the various disciplines within educational praxis. Instead what we find is a list of numbers, composed of standardized units that merely represent the ability of individuals to reproduce the educational content.

1.5 Psycho-physics and the standardized educational unit

In this section we proceed to take a closer look at the theoretical postulate that underlies the dominant forms of order and organisation that has come to influence almost all aspects of contemporary existence including education. At the root of such a theoretical postulate is for Bergson an idea that, given a certain stimulus provides a certain sensation, any minimum change in stimulus requires a corresponding change in the sensation as it registers upon consciousness and that such a change always bears a fixed relation to the original stimulus. The concern of such an idea seems to be with the moment of increase at which an external stimulus produces a change. But how do we relate the idea of a stimulus and its minimum increase into a measure of sensation unless by means of a transition from a law on the occurrence of a sensation to one that gives its measure (Bergson 2001, p. 62)?

The importance of psycho-physics though is that it reveals the subtlety of the claim that two simple states or sensations are equal, even though they are not identical. They reveal the conventional status of common forms of measurement which brush aside the qualitative aspect, to deal only with the extensive and their terms which are directly or indirectly imposed on each other under the semblance of identity. Thus while psychophysicists claim to measure the qualitative, Bergson indicates that they still depend on the underlying physical element which cannot be related to the quality unless the latter has been measured by a fraction of itself. The point in consideration is “...that two different sensations cannot be said to be equal unless some identical residuum
remains after the elimination of their qualitative difference. On the other hand, this qualitative difference being all that we perceive, it does not appear what could remain once it was eliminated” (ibid, p. 64).

The psychophysicist Fechner side stepped this concern by associating both the intensive and the extensive as a minimum differences, an ingenious application of a common residuum, a 'minima' erected on the basis of the pliability of every variation in sensation to a corresponding perceptible increase in stimulus. This minimum perceptible increase in stimulus thus serves as the rudimentary unit of measure across shades or qualities that are captured in a scale of minimum differences such that each sensation is represented as a sum of the minimal differences we have to pass through before we reach them. Bergson questions if this difference in sensation that we experience alongside a continuous increase in stimulus can really comprise an arithmetical difference unless we are conscious in our sensations of these successive change in stimuli that mark the interval between the two sensations (ibid, p. 66).

From the point of view of consciousness, these transition points reflected by the principle of minimum difference are not real, only the passing between two distinct sensations is. If the two sensations were numbers, a certain sum of units, only then a difference can be posited in terms of the succession of difference. Such an operation of addition of two simple states of consciousness seems to be an act of thought that rather arbitrarily assimilates a succession of two states into one of magnitude. For the experience of sitting in an air conditioned room seems only to reveal the quality of relief experienced as the temperature drops rather than sensing the drop of each degree. The key factor aiding in an estimate of the distance between two sensations being the continuous increase in stimuli which provides us with a rough estimate of measure either in the form of the extent of sudden jumps or intermediate landmarks that assist in registering a jump in sensation. This operation which culminates in difference by operating the stimulus as a quantity and the variation in sensation as an element of equality, thereby poses the idea of contrast as one of equal quantitative mathematical differences (ibid, p. 68).

Bergson identifies the mistake of such a reckoning with the fact that the interval between two sensations is actually experienced by consciousness as a passing rather than a difference. Even when both sensations are present at the same time, they are arithmetically related only in the rudimentary sense of two entities that lay side by side for comparison, as in subtraction. Bergson
claims that our past experiences most often allow us to associate progressive increases in stimuli with the sensation by projecting the cause into the effect. This happens especially when the contrast is between two similar sensations like the shades of grey linked to a cause whose notion of continuous distance bears upon the succession of the different sensations we experience and establishes equality among them by a more or less confused process of reasoning. Reasoning that in virtue of being based on a theoretical postulate that depends on its verification cannot be verified unless the premise is granted, a conventional assimilation that needs to recognize that quality and quantity never do really coincide (ibid, p. 70).

In conclusion to this argument on the contemporary modality of measurement, Bergson claims that the greater importance given to external objects is the reason why subjective states are objectified in terms of extensive representations of the former thereby treating qualities of sensations as magnitudes. For Bergson, such a state of affairs is symptomatic of the greater mileage in contemporary society of speech over thought which suggests the manner in which the reign of common sense and physical calculation have ignored sensations themselves as distinct internal states and reduced them to their external causes. A state of affairs that renders viable, the claim that a sensation is larger than another by proposing between the two a relation of quantity and by asserting inequality as inherent to the sensation itself, without even considering notions of space and number. A relation that does not add up numerically as the two sensations by not being objects that can be imposed on one another do not articulate the relation of the container to the contained (ibid, p. 72).

This problem is closely related to our use of the terms 'more' and 'less' that we commonly establish across notions of intensity and extensity. For in articulating the intensive in such terms, we raise amongst them the question of measure in quantitative or extensive terms and thus emerges the confusion between common sense and consciousness over two kinds of intensities. The first form of intensity draws from its quantitative or representative aspect that we discussed earlier and functions much like an acquired perception. This form transfers an idea into a sensation in associating a certain quantity of cause to a certain quality of effect. The second form of intensity occurs in the absence of an extensity and manifests as a self-sufficient yet confused perception, a discernment of measure in which intensity emerges to our discernment as the larger or smaller number of simple psychic phenomena we imagine to have participated in the state. Thus even as
these two forms of intensities seem distinct, our common use of the terms 'more' and 'less', suggests to us an intermingling between both these terms.

In the preceding few pages we saw the manner in which a particular postulate regarding a stimulus and its minimum increase shifts from a law on its occurrence to one that gives it measure. In a certain sense this seems to be the state of affairs in educational praxis as well. Now if education itself were the stimulus then doesn’t each minimum increase in its annual progress act in the same manner, jumping from a law of its occurrence to one that gives it measure? In order for us to render Bergson’s criticism of psycho-physics in educational terms we need to acknowledge popular education itself as a spatialisation, one that is carried out in this case through the medium of language. For when we consider examinations as a measure of educational quality, such a form of qualification still seems to depend on a representation of the extensive image of education. An image that is composed of distinct disciplines, rendered as discrete units composed of natural and symbolic language. This seems to be the manner in which the tendency to spatialise imposes on the measure of educational quality without realising that matters of quality can only be measured by a fraction of itself.

The crucial matter for us in this context of education is the manner in which language serves as the common residuum or what Fechner terms as 'minima'. For in education it is language that serves as the unit of minimum perceptible increase in stimulus, which then captures quality disguised as a quantity, along a scale of minimum differences in which each successive sensation is represented as a sum of minimal differences that we have had to pass through before we culminating at a particular result. In other words language serves to spatialise both curriculum and the educational 'world view' in its frame. The image thus formed captures the lifecycle of a student from primary to higher education as a series of annual affairs, each of which is characterised by a fixed portion of content that is spread over the educational calendar and increases proportionally in size and complexity every year. Now if we eliminate the qualitative differences between the different educational sensations of mathematics and social science, language seems to be the only identical residuum that remains, language that introduces a semblance of equality within the rather random organisation of educational space.

Nevertheless for Bergson such a characterisation is a property of abstract space and would seem to have nothing to do with consciousness. For as we have seen in the case of the luminosity
experiments, for Bergson the sensation of successive changes in stimuli, does not in consciousness reflect an interval between two sensations. In other words, the transition let us say between primary school and high school or between an hour of mathematics and an hour of social science rendered in terms of a succession of difference between two distinct points in educational space can be real only if they were merely numbers, a certain sum of units. On the other hand consciousness is aware only of a passing between these two distinct sensations, a passing probably captured by the summer vacation or the break between two successive school hours.

Moreover the annual numerical progress of succession in school is a rather an arbitrary act of thought, one that assimilates the succession between these two sensations as one of magnitude by imposing a continuous increase in the quantity of the stimulus to provide an estimate of measure. Such a reckoning posits the difference between primary and high school on the basis of an increase in the quantity of the stimulus as content which frames the variation in sensation on the basis of equal mathematical difference. A confused process of reasoning that derives from a habit of past experience which renders a progressive increase in stimuli by introducing cause into effect or in other words rendering education as a progressive increase by equating the quantity of content as stimulus to a quality of the sensation thus characterising an equality of terms between each step of the educational ladder. A characterisation of education that is only possible because of the popular association of cause with effect which thus recognizes the coincidence of quantity and quality which does not exist from the perspective of consciousness.

As discussed earlier this manifestation of subjective states under the terms of extensive representations is, for Bergson, due to a greater obsession with external states. This tendency reflects in contemporary society a greater impetus towards speech than thoughts, towards common sense than consciousness and towards measuring both the extensive and in extensive by means of a logic of the former than a grasping the distinct character of the latter. Education too is caught in this mix as the qualitative progress of human individuality too is now framed in quantitative or extensive terms. Educational praxis thus sketches over intensive individual states that are non-extensive on the basis of a confusion that emerges between consciousness and common sense over the manner in which they use the terms 'more' and 'less' as representative acquired perceptions and self-sufficient confused perceptions.
1.6 Bergson and the space of number

Bergson's treatment of number and the associated notions of multiplicity, discontinuity and simultaneity have interesting consequences for our discussion so far. Number in its relationship with space seems to be the crucial element through which the contemporary understanding of the physical world is forged. Bergson claims that every number whether symbolic or verbal is brought before the mind by a simple intuition, an act that posits it as an indivisible unit before consciousness. Thus although number is brought before consciousness by an act of the mind, as one, it also attaches to itself the unity of a sum. In other terms number presents itself under two aspects, namely, ultimate and provisional. As the former, number presents itself to consciousness as an indivisible and irreducible unit while as the latter it is fractional allowing for unlimited division. Number is thus not only a collection of units but units that are identical at least when involved in the process of counting. What this reveals as in the example of counting fifty sheep that Bergson provides us with is that number tends to neglect differences and only account for what is common. For when we say that there are fifty sheep in a flock we overlook the recognition of the shepherd that all the sheep are different from one another (ibid, p. 76).

Put simply, Bergson takes seriously the claim, 'one never crosses the same stream twice'. He suggests that whenever number is involved, we are introduced to the notion of abstract space where the stream remains the same. Thus, for Bergson the idea of counting fifty identical sheep can take two forms: that of a single image of fifty identical sheep set side by side or that of fifty individual images which are brought before consciousness in succession. If the sheep are identical then in the second case, counting suggests that we are dealing only with one sheep and repetition gives us an illusion of our act manifesting in duration. But in order to reach a sum, it becomes necessary for consciousness to retain successive images that we pass through and for Bergson this can only occur in space. Moreover space also reveals itself in the manner that children in a literate society are oriented with number. Their learning is aided initially by the visual images of numbers, until material representations are replaced with points which are then internalised vis-a-vis symbols. Thus though the act of counting seems to occur in time rather than in space, Bergson suggests that what we seem to do is count moments in duration using points in space (ibid, p. 78).

So while it is possible for us to conceive number as independent of space, for example, as a quick mental calculation would suggest, yet to culminate in a sum of every act of counting
requires at least a trace of the preceding items to be maintained in order for it to be added to the others. Bergson's insight in this context is that when consciousness registers a number at a particular moment, that moment in itself vanishes leaving behind merely a trace. Now space is just that which symbolically accommodates a preceding number as well make possible its unlimited divisibility. From this perspective there are two aspects to counting, the first an indivisible process of the mind by which attention is directed to different parts in space. The second, space itself “...the material with which the mind builds up number, the medium in which the mind places it” (ibid, p. 84).

Understanding addition as a process that involves a simultaneous perception of all its parts, we find ourselves with the idea of number as juxtaposition in space. A juxtaposition that would not be necessary in the case of material objects as they are already localised in space. Affective psychic states on the other hand seem to rely on symbolic representation as they are not given in space. Sensations which have their cause situated in space serve as an example, as in the case of a confused vision of a walking person that we conjure up when we localise points in space from which we hear the footsteps. Bergson contends that we can proceed with such an experience in two ways, either retaining a qualitative impression of the successive sensations where sounds are not counted but manifests as a certain air or rhythm. Or we can rely on a conception of the successive sounds in an ideal space and fancy that we are counting in duration. But counting in this sense can occur only in space, for if we insist that a moment of time does not persist, then how can we account for the intervals which separate successive sounds (ibid, p. 87)?

Bergson's analysis of number and the process of addition become important for us educationally for the manner in which it reveals time as space. The space in which educational praxis places the individual, a space that manifests all the parts of an individual lifetime beginning with preschool to adult literacy simultaneously and abiding by a process of successive progression. This insight allows us to understand better the unreality of the distinction between primary and high school that we were discussing earlier. For example the decision to make education free and compulsory for all children between the ages of six to fourteen from this perspective seems rather insensitive in understanding that spatialisation of education that abstractly juxtaposes primary education against the criteria of age. A rendering insensitive to the history of education because
before the mass introduction of mathematical time as a governing principle for society, a grade or class that accommodated differences in age up to about six years.

This disguising in educational praxis of space under the auspices of time thus reflects not only the composition of classroom but also an arrangement of society that spatially segregates the old from the young, work from education, the literate from the illiterate and labour from leisure. In this sense time functions as a principle that composes our everyday in the manner similar to that of number which has both provisional and ultimate aspects. This alludes to the fact that in educational praxis as in all other aspects of contemporary life, the day assumes an ultimate character as a standardised constant into which the provisional can be placed in an abstract manner. Take for instance the manner in which television and radio programming serves to establish this standardised uniform format of the day, every day. The content of education like television programming thus serves as the provisional, artificially stratified to a certain number hours for each discipline or program. What ensues is the disappearance of the qualitative experience characteristic of each discipline which disappears under the rubric of hourly exercises limited to prescribed content.

Let us now proceed to discuss the impenetrability of matter, a claim often considered as a fundamental property of a body, akin to that of weight and resistance. Such a property for Bergson cannot be readily observed by consciousness and is derived from the proposition that two bodies cannot occupy the same place at the same time, a logical rather than a physical necessity. But claiming that two bodies cannot occupy the same place seems unnecessary as two as a number itself seems to imply two points in space. Thus, for Bergson, to assert the impenetrability of matter is to state a property of number rather than of matter and to recognize the inter-connection between notions of number and space, an assertion that also serves to distinguish between extended objects and intensive states of consciousness (ibid, p. 89).

When we speak of counting feelings, sensations and ideas which permeate one another, we must recognise that in order to count them we need to set them in space and as distinct. But such a process as with representative sensations results in its transformation into intensity and involves a fixing in space of elements that permeate. For Bergson, such a formation of a discrete multiplicity out of our purely intensive psychic states by means of its spatialisation tends to influence these states themselves and reflect a difference between immediate perception and our reflective
consciousness. In this sense, does not time act as a homogenous medium alongside which our conscious states are laid out as a sign or symbol, as intensity is to a number of our psychic states? For Bergson, our exploration of the idea of number seems to reveal, from the perspective of the reflective consciousness, the images of time and succession as borrowed from space and that “...time, understood in the sense of a medium in which we make distinctions and count, is nothing but space” (ibid, p. 91).

This takes us into the heart of the Kantian position of space as existing independently of its contents. For Bergson, this becomes a question of whether space is a quality among other qualities or whether space as self-sufficient appears later while qualities are essentially not extended, the former an abstraction or an extract that expresses the common element of certain representative sensations while the latter a reality as solid as sensations though of a different order. This approach engages with the means by which sensations that are not extended come to occupy space and conclude through reconciliation that attributes extensity as synthesis of the two. Bergson suggests that this alliance or co-existence between sensations, the intensive and extensive, by raising the question of the activity or intervention of the mind that makes possible such an association. An act that he characterizes as an intuition or conception of an empty homogenous medium, that which enables us to distinguish identical and simultaneous sensations from one another. This is a principle of differentiation that isn’t qualitative or in other words it is a reality with no quality (ibid, p. 95).

The point that Bergson brings out is concerned with the nature of quantitative differentiation. For just by placing two different sensations side by side or one after the other as in the case of the impressions our retina receive from two points in a homogenous surface amounts to nothing more than representing a difference in quality retrospectively as a difference in situation. By this retrospective activity of the mind that transforms heterogeneous experience into the form of extensive homogeneity emerges what Bergson refers to as the idea of space. Nevertheless he claims as necessary the need to distinguish between the perception of extensity and the conception of space for “...there must be between the qualities themselves which differentiate two sensations some reason why they occupy this or that definite position in space” (ibid, p. 96).

For Bergson, it is this intuition of homogenous space that seems to be lacking among animals. For we see in the manner in which animals and even insects return home across long
distances and through paths previously unknown, almost in a straight line. The attribution of this feeling of direction to the sense of sight, smell and the perception of magnetic currents suggests in the experience of animals the absence of homogenous space in its geometrical form. Directions thus seem to appear to them purely qualitatively, for example in the natural feeling by which we distinguish two parts of our own extensity: our right from our left as if they were qualitatively different. Thus, while we may be different from animals in virtue of our faculty to abstract, Bergson clarifies that our capacity of abstraction already implies our access to a homogenous medium. One that “...conceived by the human intellect, enables us to use clear-cut distinctions, to count, to abstract, and perhaps also to speak” (ibid, p. 97).

1.7 Bergson on motion and duration
The question that now face concerns the relation between duration and time, for external objects too seem to endure along with us. From this point of view movement measured by the senses seem homogenous and measurable for like bodies in space both these durations too seem external to one another. Yet if duration cannot be measured then how is time conceptualized when we claim to measure the velocity of a movement or the oscillations of a pendulum? For Bergson, keeping track of the movement of the hand of a clock is not an act of measuring duration but one of counting simultaneities. A process characterised by space where nothing more than a single position of the hand remains for nothing of its past positions are retained. Moreover it is by the virtue of our endurance, of our transformation by a process of organization of conscious states that we picture past movements of the clock of the hand at the instant we perceive its present movement. Thus while our ego is characterized by succession without externality, pure space is characterized by mutual externality without succession (ibid, p. 109).

This brings us to the relationship between the two, which Bergson likens to an exchange along the lines of the process of endosmosis. Bergson likens this process to the corresponding individual oscillations of a pendulum in which each successive interpenetrating phase of our conscious lives are juxtaposed upon one another. By imposing upon the former, as it were, the idea of its conscious states as sharply distinguished and external to one other. This is the manner in which duration is homogenized, for consciousness seems to have organized and retained the idea of the movement of the pendulum in its memory. It is this idea of the movement of the pendulum which although set in juxtaposition to itself and taking place in one spot, then disposes itself in the
form of what we know as homogenous time. “Duration thus assumes the illusory form of a homogenous medium, and the connecting link between these two terms, space and duration, is simultaneity, which might be defined as the intersection of time and space” (ibid, p. 110).

If we encountered earlier the notion of space without succession and duration without space, then Bergson's analysis of motion seems to take this thought forward. For motion in its association with homogenous and therefore divisible space seems to refer to the space traversed than the motion itself. For even though a moving body does occupy successive positions in space, Bergson claims that the movement itself eludes space and occupies duration and thus is real only for a conscious spectator. This is because motion is not an object but a process and as a passage from one point to another is a mental synthesis which is psychic and un-extended. Moreover any point of space occupied by a moving body is nothing but a position and only consciousness is aware of motion as it achieves a synthesis of successive positions that it keeps in mind. This synthesis carried out by consciousness is a qualitative and gradual organization of our successful sensations rather than a simultaneous setting out of these same positions in homogenous medium. “This is just the idea of motion which we form when we think of it by itself, when, so to speak, from motion we extract mobility” (ibid, p. 111).

For Bergson, motion as an act is indivisible while homogenous space upon which we project the act to measure it is infinitely divisible. Thus if motion itself were infinitely divisible as the underlying space then it is possible that the interval itself will not be crossed. This confusion brings us to the paradox of the Eleatics which Bergson contends arises of the confused identification between a series of definite and indivisible acts with the infinite divisibility of homogenous space in which it occurs. Achilles outstrips the tortoise because each step of both of them constitutes indivisible acts as movements and are therefore different magnitudes in space. Zeno's mistake in this case is that he forgets that only space can be divided any which way thereby confusing motion with space. As Bergson notes, “In short, just as nothing will be found homogenous in duration except a symbolical medium with no duration at all, namely space, in which simultaneities are set out in line, in the same way no homogenous element will be found in motion except that which least belongs to it, the traversed space, which is motionless” (ibid, p. 115).
The determination of velocity for Bergson proceeds in the same way by eliminating the essential qualitative aspects of duration and mobility, and projecting instead a simultaneity arising from an apriori claim that two bodies will meet at a given point. This is why science which deals exclusively with space and simultaneity fails to capture what happens in the interval between two existing simultaneities. Moreover even astronomical prediction seems to follow such a procedure where the introduction of infinitely small intervals of duration, by counting the extremities of the interval instead of living through them, perceives in a few seconds a succession of simultaneities that would take many years for consciousness. Thus while mechanics retains of time only simultaneity, of motion only its immobility which serves as the measure of motion. A necessary state of affairs as mechanics based on equations seems to express only what is already done, such as “...the results gained at a certain moment of duration and the positions occupied by a certain body in space, but not duration and motion themselves” (ibid, p. 119).

For motion and duration are mental synthesis and though a moving body is represented as successive points on a line, motion has nothing in particular to do with space. Even though a moving body at different positions seem to occupy different moments, being heterogeneous, duration is continuous and no two moments are identical or external to one another. Discrete multiplicity is thus a process of unfolding in space in which successive states that otherwise stand alone are synthesized as a multiplicity only by a consciousness which retains and externalizes them side by side and in relation to one another. Qualitative multiplicity on the other hand is one that refrains from externalizing and discriminates qualitatively without counting or even attributing as several: “In short, we must admit two kinds of multiplicity, two possible senses of the word 'distinguish,' two conceptions, one qualitative and the other quantitative, of the difference between same and other” (ibid, p. 121).

Distinct as these two may seem, language most often betrays us in distinguishing these two different multiplicities. For the term 'several', used to describe the many conscious states that permeate each other to make up a whole, in itself reveals the manner in which the language of common sense spatialises and sets side by side what for pure reflective thought is without space or number. For Bergson this reveals a co-relation between discrete and qualitative multiplicity for alongside a line of units set up against a homogenous medium there also exists a qualitative setting up of these units on a deeper level against our consciousness. The latter qualitative progress seems
to be that which makes addition possible by facilitating the interpenetration between units set out in space such that the nature, appearance and rhythm of the whole are influenced. Thus, Bergson remarks that “it is through the quality of quantity that we form the idea of quantity without quality” (ibid, p. 123).

Now while time as a homogenous medium emerges from a symbolical representation of consciousness, there exist two aspects that are characteristic of such a series of identical terms. An aspect that is same for all the terms and another which is characteristic of each of them as in the perception of motion in external phenomena. The former due to the sameness of the external object, for example a moving body, and the latter due to the synthesis carried out by consciousness that facilitates the actual position to permeate into our recollection of previous position and thereby reorganize the whole. This is the manner in which motion predisposes duration towards a homogenous medium and projects time into space. Yet it is not only motion that disposes duration in this manner, for even objective causes in virtue of their familiarity and mutual externality allow for their symbolical representation in this manner (ibid, p. 125).

Bergson claims that at the depths of our consciousness, at the level of what he terms as the 'deep-seated' self, successive sensations still continue to merge or permeate one another. Nevertheless both these selves endure alongside one another and the identification of the superficial self with the objective causes of the external world gradually influences the dynamic nature of our personal conscious states, and thus our sensations and ideas too thus come to be separated. Yet we can also identify a reversal of this spatialising tendency when this outer crust of psychic states is removed, for example, when we sleep. Thus, for Bergson, dreams signify a state in which the ego and external objects interact differently and duration is rendered qualitatively and not quantitatively. A rendering of reality that we are capable of even in the waking state just as animals are, like consciousness when it reaches out to experience directly (ibid, p. 127).

1.8 The idea of space and the experience of duration

Bergson contends that whenever we understand time as a homogenous medium against which our conscious state unfolds, we are unwittingly introducing space to the idea of time. For homogeneity necessitates the contents of our conscious states as simultaneous or all given at once. Such a scheme of affairs seem to cohere with material objects, as they derive their exteriority from the homogenous medium they occupy which provides them with outlines by inserting intervals
between them. But such an understanding seems at odds when we consider our states of consciousness for they seem to permeate one another even when successive. For Bergson then time “...under the form of an unbounded and homogenous medium, is nothing but the ghost of space haunting the reflective consciousness” (ibid, p. 99).

The clarification that Bergson provides us with is that every time we symbolize succession, we seem to be introducing the idea of space. This is illustrated, for example, in his discussion of the movement of a point A along a straight line of unlimited length. He claims that if the point A is conscious, change and succession will be revealed to it as it moves, as a succession that is organized dynamically. But in order for this movement to take the form of a straight line, the point A will need to take a position outside of it, probably by rising above the line and perceiving simultaneously several points in juxtaposition. Otherwise for the conscious point A, movement will be characterized by qualitative changes that have reveal no outlines but rather permeate and melt into each other. Such a progression neither has relation to number nor a tendency to externalize its progress (ibid, p. 104).

At this juncture it becomes necessary to proceed with Bergson's description of duration. He describes duration as a succession of our conscious states in which the present state and former are not separated, yet the former states are not forgotten but are like notes in a tune that melt into one another. Recall, in such a context, does not set the previous state beside the present state in a manner that we set aside two points in space but involves states, past and present in an organic whole, like a living being in whom distinct parts permeate one another in virtue of their close relations. He states, “We can thus conceive of succession without distinction, and think of it as a mutual penetration, an inter-connexion and organization of elements, each of which represents the whole, and cannot be distinguished or isolated from it except by abstract thought” (ibid, p. 101).

Such an account for Bergson is only possible for a being who has no idea of space and is ever the same and ever changing. Duration thus rendered raises the question of the distinction between succession and simultaneity. For when we set our conscious states side by side in space, we render them impenetrable and succession takes the form of a continuous line or chain. What is lost by this is the ability to conceive a succession that occurs in one and the same instant. This reveals that when we speak of the reversal of an order of succession such a reversal of succession only seems plausible in space. For one cannot construe extensity out of duration nor relate positions
in space as reversible relations of succession in time. “Hence the idea of a reversible series in duration, or even simply of a certain order of succession in time, itself implies the representation of space, and cannot be used to define it” (ibid, p. 102).

Now Bergson does agree that it seems possible to measure successive moments of duration in virtue of their relation to number. Equating a minute with sixty oscillations of a pendulum, he offers two ways in which it can be pictured. Perceiving a minute as a single mental picture would mean that one does away with succession and pictures them as sixty points given simultaneously on a straight line. On the other hand picturing sixty oscillations would result in being eternally caught in the present as space would not retain an image of the preceding oscillation. But if one refrains from symbolically representing each oscillation then one can perceive each preceding oscillation as melting into the present one, resulting in a qualitative multiplicity. For Bergson while this experience of a qualitative multiplicity does provide an image of duration it nevertheless does not rid us of “…the idea of a homogenous medium or a measurable quantity” (ibid, p. 105).

Bergson seems to suggest that duration is indeed measurable, but that its measurement as quantity is revelatory not of a quantity but of a quality. This is why when the regular oscillations of a pendulum induce us to sleep; it is not the image of the last oscillation which induces us to sleep. Nor is it a recollection of all the preceding oscillation which is juxtaposed with the image of the last oscillation. Rather it is the qualitative changes of the slight but continuous stimulation of each oscillation that in a rhythmic organization of all the preceding oscillations induces one to sleep. A case is being made here for the dynamic nature of succession in duration which in essence seems to elude its specialization, because calling each sensation the same would be to depend on its objective cause than to rely on the sensation itself (ibid, p. 106).

1.9 Individuality and duration: social life and language
Now for Bergson, this tendency to spatialise, to separate and break into pieces, states of the self which melt into one another and substitute reality with its symbol is pervasive due to its convenience for social life. This is why we resist in separating our fluid inner states from their images. For while the former tends to be confusing, ever-changing, and inexpressible as language arrests its mobility, the latter is impersonal yet precise and clear. A suitable example that Bergson provides us with in this context is the experience we have over time, say of the town that we live in. For our experience of this environment, he claims, creates in us two distinct impressions, one
that is always changing and another that is permanent. For instance the objective aspects of the
town, its physical aspects buttressed by the familiarizing aspects of language seem to provide us
with a certain sense of sameness. Yet if we imagine our early impression of the same environment,
inexplicable changes are revealed as though the very objects we perceive and which impress on
our minds endure and grow with us (ibid, p. 130).

The standardization of experience is thus attributed to a certain practical instinct towards
social life which compromises individual experience. This instinct is one that confuses the feeling
itself, a perpetual state of becoming with the word that captures the feeling. The same process
which transposes the fleeting and constantly changing impressions of our inner lives to the external
objects perceived to be their cause by projecting them upon a homogenous medium. But if this
outlining of experience by language, this rendering of immobility, were absolute then there would
be no difference between perception and recognition, between learning and remembering, nor any
difference between impressions of yesterday and today.

Take for example the manner in which language renders our sensations of taste and smell.
Thus when we speak of a sensation as being pleasurable in the past but longer being so, we seem
to suggest that the particular sensation was the same while our disposition towards it changed.
Bergson identifies this change in disposition just as a means of coping with the tendency of
language to solidify sensations. For these are neither identical sensations nor multiple dispositions
but are dynamic processes which we tend to frame as objects as soon as we name and isolate them.
Rather repetition alters every sensation and our illusion of constancy derives from its association
to the word that captures the object which is its cause. Bergson thus reveals to us a certain
deceptiveness of language that convinces us not only of the un-changeableness of our sensations,
“...but it will sometimes deceive us as to the nature of the sensation felt” (ibid, p. 131).

In this light, Bergson describes words as a convenient tool to convey the stable, common
and impersonal element of human impressions within their well-defined outlines. They turn against
the delicate impressions of human consciousness and render them unstable as soon as they take
form in language by imposing their stability on the former. An overwhelming of the immediacy
of experience most visible in the case of powerful feelings such as love in which numerous
elements that aren’t exactly external to one another permeate, borrowing as it were indefinable
colours from their surroundings which are then rendered colourless in virtue of acquiring a name
and being suspended in an homogenous medium. For Bergson, such feelings are itself beings that live and develop, but lose their life and colour becoming mere shadows of their former selves when juxtaposed upon language. A juxtaposition that reduces them to an impersonal residue that constitutes the common element that characterizes the impressions felt by all speakers of that language (ibid, p. 133).

Bergson seems to trivialize such an analysis, of applying reason and logic which amounts to isolating them and setting them up by genera as though they are of use in some future deduction. Yet Bergson concedes that a bold novelist can reveal under the appearance of logic, under the juxtaposition of simple states in a homogenous medium, fundamental absurdities that bare our conventional ego. A revelation reveals to us our own authenticity, in which, the novelist still uses merely the shadow, language, to craft the illogical and extraordinary nature of the projected object. For he reveals interpenetration, the very essence of the elements expressed which momentarily brings us back to presence by raising “...the veil which we interposed between our consciousness and ourselves” (ibid, p. 134).

Bergson contends that even in the experience of immediate consciousness one can seize ideas without falling back on space or breaking up the constituents of the idea. Though in ordinary life and even philosophical discussion such a technique may seem indispensable and even convince us that parts artificially separated are genuine to the idea. In reality, we are but substituting real interpenetrating terms with a spatial juxtaposition of their symbols and making duration out of space which for Bergson is the error of associationalism. Yet we are often beset by this interpenetration as well, something that is common to all our ideas, for example as a certain instinct of our intellect with which we are disposed to certain questions. A disposition that seems difficult to justify, reason with or give account for and yet to which our beliefs adhere. That unique colouring which shades an idea in a way that is not the same for two individuals and yet which is rendered colourless for both while represented on a homogenous medium (ibid, p. 135).

Bergson has described the interpenetration that reveals the instinct and we as a disposition are associated with duration because we can liken it to the life of a cell in an organism in that it is affected whenever the whole organism is. But unlike a cell that occupies a particular point in an organism, an idea that resonates with us permeates through the whole of our organism. Yet not all ideas flow alongside the fluidity which is our conscious states, for there remains certain readymade
ideas that float upon this fluidity, that which aren’t properly assimilated. For they remain external to us as ideas that have not been cherished and thereby withered away in the life of our conscious lives. For Bergson these are the ideas that tend towards a lifeless and impersonal existence in our conscious states as characterized by their reception to representation as numerical multiplicities. We need not be surprised that this realm is littered with ideas that least belong to us, imbibed in logical reason and associated by contiguity they remain external to each other and even their relations are such that their innermost nature counts for nothing (ibid, p. 136).

We have discussed so far two aspects of conscious life, one directly perceived and the other refracted through space. The former, a pure quality that cannot be quantified or represented as numerical multiplicity as it intermingles in a manner impossible to represent by number without altering its very nature. The latter, an intuition of a homogenous medium that helps us craft a nascent distance between our sensations and the external world is one we cannot really dispense with due to its unique status in the foundation of social life. For it directs our conscious lives outwards and gradually converts these very states into objects or things of commonplace colour. A superficial self that for the sake of language and social life obscures our deeper conscious states that deals rather with the past than the present. A rendering that deals with ‘things-made’ instead of ‘things-in-the-making’ is what Bergson introduces us to the contradictions of freedom, causality and personality by placing “...succession at the very centre of simultaneity” (ibid, p. 139).

In this introductory chapter we have engaged in a philosophical exploration of the notion of time as espoused by Bergson. A brief attempt has been made to characterise the manner in which this organising principle influences the conception of education as ‘world view’, that is as an abstract all-encompassing space that simultaneously accommodates all educational variables and outcomes. Further we have explored the mechanical orientation of education as a ‘world view’ in lieu of the manner in which it conceptualises each individual as a uniform homogenous unit that succeed educationally and in a manner of linear progression.

In contrast, the last few sections of this chapter explored the idea of duration in contrast to the popular idea of time. This notion of duration not only seems to have explicated a subjective rendering of temporality but has also suggested the manner in which education may possibly proceed as a ‘way of life’. Espousing a principle of dynamism we find Bergson explain the manner in which common sense aids human beings impose the cause into the effect and therefore mistake
the quality of an effect with the quantity of the cause. He has also suggested to us a possible framework to approach education as a ‘way of life’ through his descriptions of the qualitative manner in which our internal emotional states seem to progress or succeed. This description is particularly significant as it suggests what exactly is missed out in the instrumentalism of contemporary educational praxis as discussed by the educational sociologist Bernstein and the educationalist Varkoy.

The popular ‘world view’ of education thus reveals to us an insignificant appreciation of the concept of duration in the praxis of contemporary educational institutions. From the perspective of free will in education, a Bergsonian approach seems to point us toward the contemporary realm of educational praxis as a space of overt determination rather than a journey of self-determination. Bergson’s discussion of natural language and the role it plays in social life suggests to us the extent of the spatialising tendency of culture and its influence on individual experience. This is the manner in which Bergson provides us with resources to understand the contemporary predicament in education as well as society.