



An Introduction to the Rhizomatic Curriculum: Rethinking Deleuzian Approach to Education

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ABSTRACT:

This paper drawing upon the Rhizome concept as a botanical metaphor in theory of curriculum and its underpinning principles articulates the smooth rhizomatic space as the essence of the philosophy of Gilles Deleuze and discusses its applications in curriculum and education development. The rhizomatic environment looks at curriculum from a new perspective assuming curriculum as a symbolic and moving event. Implications of the Rhizome theory in curriculum development are examined as the main objectives of the study.

Key words: Rhizome, Rhizomatic Space, Deleuze, Deleuzian Education, Collaboration, Smooth Space, Striated Space, Reteritorization.

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INTRODUCTION

The increasingly transitory nature of what is lauded as current or accurate in new and developing fields, as well as the pace of change in Western culture more broadly, has made it difficult for society in general and education in particular to define what counts as knowledge. The existing educational model with its expert-centered pedagogical planning and publishing cycle is too static and prescribed to accommodate the kind of fluid, transitory conception of knowledge that is necessary to understand the simplest of Web-based concepts. The ephemeral nature of the Web and the rate at which cutting-edge knowledge about it and on it becomes obsolete disrupts the painstaking process by which knowledge has traditionally been codified. Traditional curricular domains are based on long-accepted knowledge, and the "experts" in those domains are easily identified by comparing their assertions with the canon of accepted thought (Banks, 1993); newer concepts, whether in technology, physics, or modern culture, are not easily compared against any canon. This lack of a center of measurement for what is "true" or "right" makes the identification of key pieces of knowledge in any of these fields a precarious task. In less-traditional curricular domains then, knowledge creators are not accurately epitomized as traditional, formal, verified experts; rather, knowledge in these areas is created by a broad collection of knowers sharing in the construction and ongoing evolution of a given field. Knowledge becomes a negotiation (Farrell, 2001). Knowledge as negotiation is not an entirely new concept in educational circles; social constructivist and connectivist pedagogies, for instance, are centered on the process of negotiation as a learning process. Neither of these theories, however, is sufficient to represent the nature of learning in the online world.

There is an assumption in both theories that the learning process should happen organically but that knowledge, or what is to be learned, is still something independently verifiable with a definitive beginning and end goal determined by curriculum. A botanical metaphor, first posited by Deleuze and Guattari in *A Thousand Plateaus* (Deleuze and Guattari, 1987), may offer a more flexible conception of knowledge for the information age: the rhizome. A rhizomatic plant has no center and no defined boundary; rather, it is made up of a number of semi-independent nodes, each of which is capable of growing and spreading on its own, bounded only by the limits of its habitat (Cormier, 2008). In the rhizomatic view, knowledge can only be negotiated, and the contextual, collaborative learning experience shared by constructivist and connectivist pedagogies is a social as well as a personal knowledge-creation process with mutable goals and constantly negotiated premises. The rhizome metaphor, which represents a critical leap in coping with the loss of a canon against which to compare, judge, and value knowledge, may be particularly apt as a model for disciplines on the bleeding edge where the canon is fluid and knowledge is a moving target. The rhizomatic model has many implications in curriculum and education which are discussed in this paper.

The metaphor rhizome as a mode of knowledge

Gilles Deleuze and Félix Guattari use the term "rhizome" and "rhizomatic" to describe theory and research that allows for multiple, non-hierarchical entry and exit points in data representation and interpretation. In *A Thousand Plateaus*, they oppose it to an arborescent conception of knowledge, which works with dualist categories and binary choices. A rhizome works with planar and trans-species connections, while an arborescent model works with vertical and linear connections. Their use of the "orchid and the wasp" is taken from the biological concept of mutualism, in which two different species interact together to form a multiplicity (i.e. a unity that is multiple in itself). Horizontal gene transfer would also be a good illustration. As a model for culture, the rhizome resists the organizational structure of the root-tree system which charts causality along chronological lines and looks for the originary source of "things" and looks towards the pinnacle or conclusion of those "things." A rhizome, on the other hand, "ceaselessly established connections between semiotic chains, organizations of power, and circumstances relative to the arts, sciences, and social struggles." Rather than narrativize history and culture, the rhizome presents history and culture as a map or wide array of attractions and influences with no specific origin or genesis, for a "rhizome has no beginning or end; it is always in the middle, between things, interbeing, intermezzo." The planar movement of the rhizome resists chronology and organization, instead favoring a nomadic system of growth and propagation. In this model, culture spreads like the surface of a body of water, spreading towards available spaces or trickling downwards towards new spaces through fissures and gaps, eroding what is in its way. The surface can be interrupted and moved, but these disturbances leave no trace, as the water is charged with pressure and potential to always seek its equilibrium, and thereby establish smooth space (Deleuze & Guattari, 1987: 3-80; Deleuze, 1995).

The semantic of rhizome and its principles according to deleuze and deleuzian thinkers

The rhizome itself assumes very diverse forms, from ramified surface extension in all directions to concretion into bulbs and tubers. When rats swarm over each other. The rhizome includes the best and the worst: potato and couchgrass, or the weed. Animal and plant, couchgrass is crabgrass. We get the distinct feeling that we will convince no one unless we enumerate certain approximate characteristics of the rhizome:

1 & 2. Principles of connection and heterogeneity: any point of a rhizome can be connected to anything other, and must be. This is very different from the tree or root, which plots a point, fixes an order. The linguistic tree on the Chomsky model still begins at a point S and proceeds by dichotomy. On the contrary, not every trait in a rhizome is necessarily linked to a linguistic feature: semiotic chains of every nature are connected to very diverse modes of coding (biological, political, economic, etc.) that bring into play not only different regimes of signs but also states of things of differing status. Collective assemblages of enunciation function directly within machinic assemblages; it is not impossible to make a radical break between signs and their objects. Even when linguistics claims to confine itself to what is explicit and to make no presuppositions about language, it is still in the sphere of a discourse implying particular modes of assemblage and types of social power. Chomsky's grammaticality, the categorical S symbol that dominates every sentence, is more fundamentally a marker of power than a syntactic marker: you will construct grammatically correct sentences, you will divide each statement into a noun phrase and a verb phrase (first dichotomy). Our criticism of these linguistic models is not that they are too abstract but, on the contrary, that they are not abstract enough, that they do not reach the abstract machine that connects a language to the semantic and pragmatic contents of statements, to collective assemblages of enunciation, to a whole micropolitics of the social field. A rhizome ceaselessly establishes connections between semiotic chains, organizations of power, and circumstances relative to the arts, sciences, and social struggles. A semiotic chain is like a tuber agglomerating very diverse acts, not only linguistic, but also perceptive, mimetic, gestural, and cognitive: there is no language in itself, nor are there any linguistic universals, only a throng of dialects, patois, slangs, and specialized languages. There is no ideal speaker-listener, any more than there is a homogeneous linguistic community.

Language is, in Weinrich's words, "an essentially heterogeneous reality." There is no mother tongue, only a power takeover by a dominant language within a political multiplicity. Language stabilizes around a parish, a bishopric, a capital. It forms a bulb. It evolves by subterranean stems and flows, along river valleys or train tracks; it spreads like a patch of oil. It is always possible to break a language down into internal structural elements, an undertaking not fundamentally different from a search for roots. There is always something genealogical about a tree. It is not a method for the people. A method of the rhizome type, on the contrary, can analyze language only by decentering it onto other dimensions and other registers. A language is never closed upon itself, except as a function of impotence (Deleuze & Guattari, 1987).

3. Principle of multiplicity: it is only when the multiple is effectively treated as a substantive, "multiplicity," that it ceases to have any relation to the One as subject or object, natural or spiritual reality, image and world.

Multiplicities are rhizomatic, and expose arboreal pseudo multiplicities for what they are. There is no unity to serve as a pivot in the object, or to divide in the subject. There is not even the unity to abort in the object or "return" in the subject. A multiplicity has neither subject nor object, only determinations, magnitudes, and dimensions that cannot increase in number without the multiplicity changing in nature (the laws of combination therefore increase in number as the multiplicity grows). Puppet strings, as a rhizome or multiplicity, are tied not to the supposed will of an artist or puppeteer but to a multiplicity of nerve fibers, which form another puppet in other dimensions connected to the first: "Call the strings or rods that move the puppet the weave. It might be objected that its multiplicity resides in the person of the actor, who projects it into the text. Granted; but the actor's nerve fibers in turn form a weave. And they fall through the gray matter, the grid, into the undifferentiated... The interplay approximates the pure activity of weavers attributed in myth to the Fates or Norns." An assemblage is precisely this increase in the dimensions of a multiplicity that necessarily changes in nature as it expands its connections. There are no points or positions in a rhizome, such as those found in a structure, tree, or root. There are only lines. When Glenn Gould speeds up the performance of a piece, he is not just displaying virtuosity, he is transforming the musical points into lines, he is making the whole piece proliferate. The number is no longer a universal concept measuring elements according to their emplacement in a given dimension, but has itself become a multiplicity that varies according to the dimensions considered (the primacy of the domain over a complex of numbers attached to that domain). We do not have units (unités) of measure, only multiplicities or varieties of measurement. The notion of unity (unité) appears only when there is a power takeover in the multiplicity by the signifier or a corresponding subjectification proceeding: This is the case for a pivot-unity forming the basis for a set of bi-univocal relationships between objective elements or points, or for the One that divides following the law of a binary logic of differentiation in the subject. Unity always operates in an empty dimension supplementary to that of the system considered (overcoding). The point is that a rhizome or multiplicity never allows itself to be overcoded, never has available a supplementary dimension over and above its number of lines, that is, over and above the multiplicity of numbers attached to those lines. All multiplicities are flat, in the sense that they fill or occupy all of their dimensions: we will therefore speak of a plane of consistency of multiplicities, even though the dimensions of this "plane" increase with the number of connections that are made on it. Multiplicities are defined by the outside: by the abstract line, the line of flight or deterritorialization according to which they change in nature and connect with other multiplicities. The plane of consistency (grid) is the outside of all multiplicities. The line of flight marks: the reality of a finite number of dimensions that the multiplicity effectively fills; the impossibility of a supplementary dimension, unless the multiplicity is transformed by the line of flight; the possibility and necessity of flattening all of the multiplicities on a single plane of consistency or exteriority, regardless of their number of dimensions. The ideal for a book would be to lay everything out on a plane of exteriority of this kind, on a single page, the same sheet: lived events, historical determinations, concepts, individuals, groups, social formations. Kleist invented a writing of this type, a broken chain of affects and variable speeds, with accelerations and transformations, always in a relation with the outside. Open rings. His texts, therefore, are opposed in every way to the classical or romantic book constituted by the interiority of a substance or subject. The war machine-book against the State apparatus book. flat multiplicities of n dimensions are asignifying and asubjective. They are designated by indefinite articles, or rather by partitives (some couchgrass, some of a rhizome...) (Deleuze, 1995; Deleuze & Guattari, 1987).

4. Principle of asignifying rupture: against the oversignifying breaks separating structures or cutting across a single structure. A rhizome may be broken, shattered at a given spot, but it will start up again on one of its old lines, or on new lines. You can never get rid of ants because they form an animal rhizome that can rebound time and again after most of it has been destroyed. Every rhizome contains lines of segmentarity according to which it is stratified, territorialized, organized, signified, attributed, etc., as well as lines of deterritorialization down which it constantly flees. There is a rupture in the rhizome whenever segmentary lines explode into a line of flight, but the line of flight is part of a rhizome. These lines always tie back to one another. That is why one can never posit a dualism or a dichotomy, even in the rudimentary form of the good and the bad. You may make a rupture, draw a line of flight, yet there is still a danger that you will reencounter organizations that re-stratify everything, formations that restore power to a signifier, attributions that reconstitute a subject – anything you like, from Oedipal resurgences to fascist concretions. Groups and individuals contain microfascisms just waiting to crystallize. Yes, couchgrass is also a rhizome. Good and bad are only the products of an active and temporary selection, which must be renewed. How could movements of deterritorialization and processes of reterritorialization not be relative, always connected, caught up in one another?

The orchid deterritorializes by forming an image, a tracing of a wasp; but the wasp reterritorializes on that image. The wasp is nevertheless deterritorialized, becoming a piece in the orchid's reproductive apparatus. But it reterritorializes the orchid by transporting its pollen. Wasp and orchid, as heterogeneous elements, form a rhizome. It could be said that the orchid imitates the wasp, reproducing the image in a signifying fashion (mimesis, mimicry,

lure, etc.). But this is true only on the level of the strata – a parallelism between two strata such that a plant organization on one imitates an animal organization on the other. At the same time, something else entirely is going on: not imitation at all but a capture of code, surplus value of code, an increase in valence, a veritable becoming, a becoming-wasp of the orchid and a becoming-orchid of the wasp. Each of these becomings brings about the deterritorialization of one term and the reterritorialization of the other; the two becomings interlink and form relays in a circulation of intensities pushing the deterritorialization ever further. There is neither imitation nor resemblance, only an exploding of two heterogeneous series on the line of flight composed by a common rhizome that can no longer be attributed to or subjugated by anything signifying. Remy Chauvin expresses it will: "the aparallel evolution of two beings that have absolutely nothing to do with each other." More generally, evolutionary schemas may be forced to abandon the old model of the tree and descent. Under certain conditions, a virus can connect to germ cells and transmit itself as the cellular gene of a complex species; moreover, it can take flight, move into the cells of an entirely different species, but not without bringing with it "genetic information" from the first host (for example, Benveniste and Todaro's current research on a type C virus, with its double connection to baboon DNA and the DNA of certain domestic cats). Evolutionary schemas would no longer follow models of arborescent descent going from the least to the most differentiated, but instead a rhizome operating immediately in the heterogeneous and jumping from one already differentiated line to another. Once again, there is aparallel evolution, of the baboon and the cat; it is obvious that they are not models or copies of the other (a becoming-baboon in the cat does not mean the cat "plays" baboon). We form a rhizome with our viruses, or rather our viruses cause us to form a rhizome with other animals. As François Jacob says, transfers of genetic material by viruses or through other procedures, fusions of cells originating in different species, have results analogous to those of "the abominable couplings dear to antiquity and the Middle Ages." Transversal communications between different lines scramble the genealogical trees. Always look for the molecular, or even submolecular, particle with which we are allied. We evolve and die more from our polymorphous and rhizomatic flux than from hereditary diseases, or diseases that have their own line of descent. The rhizome is an anti-genealogy. The same applies to the book and the world: contrary to a deeply rooted belief, the book is not an image of the world. It forms a rhizome with the world, there is an aparallel evolution of the book and the world; the book assures the deterritorialization of the world, but the world effects a reterritorialization of the book, which in turn deterritorializes itself in the world (if its capable, if it can). Mimicry is a very bad concept, since it relies on binary logic to describe phenomena of an entirely different nature. The crocodile does not reproduce a tree trunk, any more than the chameleon reproduces the colors of its surroundings. The Pink Panther imitates nothing, it reproduces nothing, it paints the world its color, pink on pink; this is its becoming-world, carried out in such a way that it becomes imperceptible itself, a signifying, makes its rupture, its own line of flight, follows its "aparallel evolution" through to the end. The wisdom of the plants: even with something else – with the wind, an animal, human beings (and there is also an aspect under which animals themselves form rhizomes, as do people, etc.). "Drunkenness as a triumphant irruption of the plant in us." Always follow the rhizome by rupture; lengthen, prolong, and relay the line of flight; make it vary, until you have produced the most abstract and tortuous of lines of n dimensions and broken directions. Conjugate deterritorialized flows. Follow the plants: you start by delimiting a first line consisting of circles of convergence around successive singularities; then you see whether inside that line new circles of convergence establish themselves, with new points located outside the limits and in other directions. Write, form a rhizome, increase your territory by deterritorialization, extend the line of flight to the point where it becomes an abstract machine covering the entire plane of consistency. "Go first to your old plant and watch carefully the watercourse made by the rain. By now the rain must have carried the seeds far away. Watch the crevices made by the runoff, and from them determine the direction of the flow. Then find the plant that is growing at the farthest point from your plant. All the devil's weed plants that are growing in between are yours. Later...you can extend the size of your territory by following the watercourse from each point along the way." Music has always sent out lines of flight, like so many "transformational multiplicities," even overturning the very codes that structure or arborify it; that is why musical form, right down to its ruptures and proliferations is comparable to a weed, a rhizome (Deleuze and Guattari, 1987; Deleuze, 1995).

5 & 6. Principle of cartography and decalomania: a rhizome is not amenable to any structural or generative model. It is a stranger to any idea of genetic axis or deep structure. A genetic axis is like an objective pivotal unity upon which successive stages are organized; a deep structure is more like a base sequence that can be broken down into immediate constituents, while the unity of the product passes into another, transformational and subjective, dimension. This does not constitute a departure from the representative model of the tree, or root – pivotal taproot or fascicles (for example, Chomsky's "tree" is associated with a base sequence and represents the process of its own generation in terms of binary logic).

A variation on the oldest form of thought. It is our view that genetic axis and profound structure are above all infinitely reproducible principles of tracing. All of tree logic is logic of tracing and reproduction. In linguistics as in psychoanalysis, its object is an unconscious that is itself representative, crystallized into codified complexes, laid out along a genetic axis and distributed within a syntagmatic structure. Its goal is to describe a de facto state, to maintain balance in intersubjective relations, or to explore an unconscious that is already there from the start, lurking in the dark recesses of memory and language. It consists of tracing, on the basis of an overcoding structure or supporting axis, something that comes ready-made. The tree articulates and hierarchizes tracings; tracings are like the leaves of a tree. The rhizome is altogether different, a map and not a tracing. Make a map, not a tracing. The orchid does not reproduce the tracing of the wasp; it forms a map with the wasp, in a rhizome. What distinguishes the map from the tracing is that it is entirely oriented toward an experimentation in contact with the real. The map does not reproduce an unconscious closed contact with the real. The map does not reproduce an unconscious closed in upon itself; it constructs the unconscious. It fosters connections between fields, the removal of blockages on bodies without organs, the maximum opening of bodies without organs onto a plane of consistency. It is itself a part of the rhizome. The map is open and connectable in all of its dimensions; it is detachable, reversible, susceptible to constant modification. It can be torn, reversed, adapted to any kind of mounting, reworked by an individual, group, or social formation. It can be drawn on a wall, conceived of as a work of art, constructed as a political action or as a meditation. Perhaps one of the most important characteristics of the rhizome is that it always has multiple entryways; in this sense, the burrow is an animal rhizome, and sometimes maintains a clear distinction between the line of flight as passageway and storage or living strata (cf. the muskrat).

A map has multiple entryways, as opposed to the tracing, which always comes back "to the same." The map has to do with performance, whereas the tracing always involves an alleged "competence." Unlike psychoanalysis, psychoanalytic competence (which confines every desire and statement to a genetic axis or overcoding structure, and makes infinite, monotonous tracings of the stages on that axis or the constituents of that structure), schizoanalysis rejects any idea of pre-traced destiny, whatever name is given to it – divine, anagogic, historical, economic, structural, hereditary, or syntagmatic (Deleuze & Guattari, 1987; Deleuze, 1995).

The rhizomatic model of curriculum and education

In the rhizomatic model of learning, curriculum is not driven by predefined inputs from experts; it is constructed and negotiated in real time by the contributions of those engaged in the learning process. This community acts as the curriculum, spontaneously shaping, constructing, and reconstructing itself and the subject of its learning in the same way that the rhizome responds to changing environmental conditions: The rhizome is an antigenealogy. It is a short-term memory, or antimemory. The rhizome operates by variation, expansion, conquest, capture, offshoots. Unlike the graphic arts, drawing or photography, unlike tracings, the rhizome pertains to a map that must be produced, constructed, a map that is always detachable, connectible, reversible, modifiable, and has multiple entryways and exits and its own lines of flight (Deleuze and Guattari 1987). With this model, a community can construct a model of education flexible enough for the way knowledge develops and changes today by producing a map of contextual knowledge. The living curriculum of an active community is a map that is always "detachable, connectible, reversible, modifiable, and has multiple entryways and exits": If the world of media education is thought of as a rhizome, as a library à la Eco [in *The Name of the Rose*], then we need to construct our own connections through this space in order to appropriate it. However, instead of that solitary groping made by Brother William, we see as our goal the co-construction of those secret connections as a collaborative effort (Tella, 2000). In the practical example of Couros's class, students created their own rhizomatically mapped curriculum by combining their blogs with information to which Couros pointed them and linking the combination to the particular knowledge that they discovered through discussions with key people in Couros's professional community. In accessing Couros's professional network, students had the opportunity to enter the community themselves and impact the shape of its curriculum as well as their own learning. The role of the instructor in all of this is to provide an introduction to an existing professional community in which students may participate— to offer not just a window, but an entry point into an existing learning community. In a sense, the rhizomatic viewpoint returns the concept of knowledge to its earliest roots. Suggesting that a distributed negotiation of knowledge can allow a community of people to legitimize the work they are doing among themselves and for each member of the group, the rhizomatic model dispenses with the need for external validation of knowledge, either by an expert or by a constructed curriculum. Knowledge can again be judged by the old standards of "I can" and "I recognize." If a given bit of information is recognized as useful to the community or proves itself able to do something, it can be counted as knowledge. The community, then, has the power to create knowledge within a given context and leave that knowledge as a new node connected to the rest of the network. Indeed, the members themselves will connect the node to the larger network. Most people are members of several communities—acting as core members in some, carrying more weight and engaging more extensively in the discussion, while offering more casual contributions in

others, reaping knowledge from more involved members (Cormier, 2007). This is the new reality. Knowledge seekers in cutting-edge fields are increasingly finding that ongoing appraisal of new developments is most effectively achieved through the participatory and negotiated experience of rhizomatic community engagement. Through involvement in multiple communities where new information is being assimilated and tested, educators can begin to apprehend the moving target that is knowledge in the modern learning environment (Deleuze, 1995).

Propositions on the rhizomatic (deleuzian) space and its implications in curriculum development

The nature of curriculum: Deleuzian curriculum is very different from the traditional one. Deleuze's curriculum is nomadic, expression-centered and like a plateau (Deleuze and Guattari, 1987; Hunan, 2004; Roy, 2004). According to Deleuze, curriculum should be like a plateau, a plateau has multiplicity. It means while it has the connection, it also has the heterogeneity. In Deleuze's curriculum, relation and communication play a major role. According to him, if you want to have a nomadic and expression-centered curriculum, it should be such these:

- A subject always changes. Becoming is a central and essential property in rhizomatic curriculum.
- Its studies are based on cultural and individual differences.
- Its priority is based on the principle of multiplicity (Deleuze & Guattari, 1987; Hunan, 2004; Roy, 2004).

The goal/goals of curriculum: According to Deleuze's theory, the main goal of curriculum and education is the production of a democratic and smooth space and promotion of horizontal and open thinking. The democratic space and education is in which emphasizes on difference and heterogeneity. In this view, in addition to note the desires and individual differences, the other cultures should also be noted and the minorities and subcultures should also be considered as opportunities (Deleuze, 1995; Kohli, 2002; Semetsky, 2007; Marshal, 1989)

CONCLUSION

Deleuze developed the understanding of knowledge, curriculum and education as rhizomatic to disrupt taken-for-granted understandings in modernist philosophy of knowledge as "linear" and "logical", expressed most commonly in the use of the metaphor of the "tree of knowledge". It can help to understand rhizomatics by applying other horticultural metaphors to this postmodern understanding of knowledge. Many types of grasses, bromeliads, and members of the ginger plant families are rhizomatic: rather than having a linear type root system attached to a central trunk, they have complex networks of root systems. Plants can grow from any point in this network, and each plant is attached to the other through the network. A rhizotextual analysis involves the exploration of the "middles" of these rhizomes. (Deleuze & Guattari, 1987: 22) refer to the middle as a plateau that is "any multiplicity connected to other multiplicities by superficial underground stems in such a way as to form or extend a rhizome". In thinking about plants as rhizomatic systems then, the middles or plateaus are those plants that grow above the ground, that are connected to each other by the underground root systems. In the rhizome of the English syllabus texts, such plateaus are formed by various discursive systems, systems that are connected by what I call "provisional linkages". Often, discourse analyses are concerned with the "teasing apart" of discourses, tracing the different appearances of different discourses. A rhizotextual analysis looks instead at the connections between the discourses through a "mapping" of the whole rhizome. Mapping the rhizome of the Queensland English Syllabus involved searching for the connections, disconnections, the "new articulations" that form the plateaus:

In drawing maps, the theorist works at the surface, "creating" possible realities by producing new articulations of disparate phenomena and connecting the exteriority of objects to whatever forces or directions seem potentially related to them. As such, maps exceed both individual and collective experiences of what seems "naturally" real (Dimitriades & Kamberelis, 1997: 150). Anyway, Deleuzian theory of curriculum's implications are not limited to what they are said to this paper and it is necessary for others to analyze the other dimensions and implications of Deleuze's doctorins.

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