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REGULAR ARTICLE

Mapping Concepts of Agency in Educational Contexts

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Abstract The purpose of this conceptual paper is to explore and map the "espoused theories" (Argyris and Schön 1978) of agency used in educational contexts. More precisely, we limit the focus on the normative view of student agency assumed within dominant school practices, desired by educational practitioners, leaving out nonnormative emerging agencies such as student agency of resistance. Agency is a "tricky" concept, and often scholars who use the concept of agency do not define or operationalize it (e.g., Archer 2000). One reason is that there is no consensus among scholars about the notion of agency, especially when applied to educational contexts (Hitlin and Elder Sociological Theory, 25 (2), 170-191, 2007). Moreover, the recent neoliberal framing of individuals' agency as fully autonomous, flexible, and selfentrepreneur is adding the dilemma of agency manipulation in the sphere of education (Gershon 2011; Sidorkin 2004). To tackle this dilemma in educational contexts, we suggest to further interrogating the normative notion of agency in all its modes and develop a more nuanced conceptualization. We hope that such conceptualization would produce an understanding of the diverse manifestations and definitions of agency within a human ideal, educational content, behaviors, and social settings. We observed diverse uses of the normative term "agency" in educational discourse. We examined the term as used by researchers and practitioners. We also looked at the different ways it has been used in philosophical discussions of education, political framing of the civic role of schooling, disciplinary policy statements, school mission statements, and in

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everyday common use. It is worthy to note that our categorization of the use and meaning of the normative term "agency" depends on the scholars' epistemological paradigmatic assumptions, socio-political and historical situatedness, and ontological projects being translated into diverse scholarships of education. As a result of our research, we suggest four major normative conceptual frameworks related to agency mainly being adopted in educational contexts that we labeled as: 1) instrumental, 2) effortful, 3) dynamically emergent, and 4) authorial. In this paper, we discuss these normative approaches to agency as we compare and contrast the assumptions and their consequences for the current field of education, mostly from a point of view of authorial definition of agency (our bias).

Keywords Agency · Authorial agency · Democratic education

Introduction

What is agency and why is the concept of agency (or a family of concepts) so attractive and for whom? We have found diverse definitions and understanding of this notion in the history, literature, practices, and theories of education. We do not think that one "correct" definition of "agency" exists or is even helpful to develop. For example, in an anthropological research of "Frenchness" among Canadian nationalists, there was no overlap in the diverse and, at times contradictory, definitions of what means to be French in Canada (Linger 1994). We think this might be exactly the case among all diverse definitions of agency. Nevertheless, similar to the social phenomenon of French nationalism in Canada, the notion of agency can be powerful and useful in defining and guiding educational practices (and beyond), despite or sometimes because of this diversity and ambivalence. This diversity may represent tensions and struggles in diverse practices, communities, and ideologies (not unlike among and between French Canadian nationalists and other ideologists). In this conceptual paper, we try to investigate, analyze, and interrogate a diversity of normative notions of "agency." We are not interested in searching for "an overlap" among the diverse normative approaches to agency but rather want to explore the distinct mobilizing effects of these approaches for educators.

The organization of our paper is the following. We start with tracing the normative concept of agency within the literature focusing on the historical and contemporary grounds on which the concept has been employed. Within this analysis, we map the patterns of diverse approaches to agency. Based on our findings, next we describe and critically analyze four abstracted normative types of agency with a focus on education: instrumental, effortful, dynamically emergent, and authorial. The latter represent our own bias. Finally, we focus on analyzing diverse educational practices as guided by the normative approach of authorial agency.

¹ For more information on the French Canadian nationalism see http://www.thecanadianencyclopedia.ca/en/article/french-canadian-nationalism/



Tracing the Concept of Agency to Historical and Contemporary Contexts

Within humanitarian studies, 2 the concept of agency 3 is situated in the history of religion, philosophy, ethics, and law before penetrating the discourse of education. One of the main philosophical, theological, moral, and practical issues calling for a concept of agency, and thus, heuristically defines agency, is out of a need for legal, ethical, moral, and practical notions of human responsibility. Thus having agency is to attribute choice, decision, practice and responsibility to a person's, an individual's, or a group's judgment outside natural and external causes, iron logic, laws of nature, and necessities. This is why agency is referred as "free will", "knowing right and wrong", "soul", "fault", "sin", "authorship", "praise", "addressee", "respondent", and so on. In the West, Christian theological considerations of God as the ultimate agency and humans being "created in God's image" (cf. Bible) put the concept of agency in the front line of the investigation. There have been theological debates of why the almighty god cannot make all people good. Some theologians (e.g., St. Thomas Aquinas) have argued that by making all people good, the people would stop being in the image of the God — i.e., they would lose their agency and judgments ascribing the possibility of their actions to be bad and evil. Thus, in philosophical and religious assumptions, good is meaningless without people being free agents. Through this Western assumption, highly developed in the Enlightenment, lodged both in humanist and theological notions of people being free, the following related ideas have been constructed and put forward: choice, freedom, freedom of choice, tolerance of diversity, dignity, creativity, originality, authorship, humanity, respect for one's own actions (which may be even incomprehensible and disagreeable to others), pluralism, democracy, liberalism, and so on (Davies 1998; Hitlin and Elder 2007). An excellent overview of the conceptual development of human agency is provided by Sugarman and Sokol (2012). However, it is important to heed the words of Foucault (1984) on human agency, "everything [else] that has ever been linked with humanism is to be rejected, but that the humanistic thematic is in itself too supple, too diverse, too inconsistent to serve as an axis for reflection" (p. 44). In this paper, the axes of reflection are on the myriad forms of agency, as manifested within school and education contexts. For instance, in the modern global economy, there seems to be growing interest in the concept of agency. Some scholars argue that the rationale for agency is the art of neoliberal governmentalism that regards the individual as an autonomous, rational, universal, self-disciplining, and self-entrepreneuring subject who needs to continuously compete in a social sphere, like in an economic market, based on calculations of a "cost-benefit" economic analysis (Foucault, Burchell, Gordon, and Miller 1991; Larner 1995; Larner and Walters 2004).

Another competing view comes from an exponential rise of automatization, robotization, computerization, telecommunication, nanotechnology, and outsourcing of the

⁴ "...a 'self-entrepreneurial' individual [is own who] validates the decision of those inclined to attempt standing on their own rather than be supported by an affiliation to a company or any other kind of institution" (Aronsson 2015).



² All studies and sciences that involve studying human affairs (Bakhtin 1986).

³ The concept of agency is polysemic. We want to distinguish our use of the notion of agency here from a reference to competent service and fulfillment of a client's will (as it, for example, is in "travel agency") (Shapiro 2005).

standards-based labor to India and China (both blue-collar and white-collar). In this regard, there seems to be an awakened interest in agency-based labor requiring creativity, originality, authorship, and uniqueness from the workers (Collins and Halverson 2009; Kaku 2011; Pink 2005; Zhao 2009). To this point, some argue that agency also expresses people's desires for cultural appreciation of unpredictability and creativity: for what might be, what cannot be presently thought of, and what cannot be automatized and calculated in advance (Lanier 2010; Lobok 2012), making agency an increasingly important concept for innovation and creativity (Zhao 2009). Though these transitions may take time, according to the renown physicist Michio Kaku (2011), the qualitative changes have to be expected just within decades and by the end of this century the transition from a knowledge- and skill-based economy to an agency-based economy, education, and society (and a collapse of a necessity-based capitalism) will be achieved. Thus, the evermore growing unpredictable pace of technological and societal changes requires us, scholars dealing with educational issues, to focus our educational expectations on the unexpected as new knowledge, new desires for agency, new technologies - and with these the collapse of former forms - become more and more prevalent in one lifespan.

Contestations Around the Diverse Normative Definitions of Agency

Famously, the French philosopher René Descartes put forward a dualistic picture of human nature as a combination of a mechanical body, governed by natural causes represented in logical, rational rules, mechanisms, and necessities besides an immortal discursive cognitive reason-based soul/mind that transcends these natural causes (i.e., rational agency) (Baker and Morris 2002). Since Descartes, there have been many attempts, though still rather unsuccessful in our judgment, to develop a monistic vision of body and mind. However, while these attempts seek to preserve the notion of agency as irreducible to nature and necessities, the monistically oriented thinkers often try to explain agency's emergence from natural causes and necessities to the extent that they often to ground it (if they do not eliminate it at all!) in these natural causes. For example, natural sciences, psychology, sociology, and artificial intelligence have provided many explanations of activities that do not require agency such as mechanical causality, random processes, self-organization, psychological fields and affordances, emergent dynamics, biological needs and urges, scarcity, unconditional and conditional reflexes, and so on. Meanwhile, behaviorism in psychology tried, arguably unsuccessfully, to reduce all human activities to only natural causes and necessities without agency (Smith 1986).

At the root of this tension is probably an Enlightenment distrust for the presumed capricious, disagreeable, alien, arbitrary, and/or ignorant individuals leading to the notion that the individual must first be made rational before they may be considered autonomous (Davies 1998). For instance, Kant introduced an idea of humans achieving goodness as agents besides God; hence trust, as the basis for good civil order, could be established without despotic or ideological authority and yet be irrefutable: a "mechanical management of people... is everywhere the most certain means for keeping legal order" (LaVaque-Manty 2006, p. 385). This management, disinterested and objective, must be in individual persons and would depend on logical, near



mathematical, universal formulations (and widespread adoption) of a code of ethics by all "rational thinkers." Autonomy would not lead to civil disruption if founded on rational logic that individuals are willing to inscribe in themselves. Agency would express a selfcontrol as well as consensus, because it implies a requirement that before autonomy, agents must develop rational agency, and must organize their actions on a universal rationality that will stem from a social consensus among similarly rational agents. This is one reason why institutional agencies have been developed, such as child welfare, the school system, or trust funds to act on behalf of those without sufficient rational autonomy; the mentally challenged and children. This suggests to some that conventional schooling is in the uncomfortable position of promoting rational autonomy while distrusting and restricting students' immature and irrational agency (Kant and Semple 1836; Osberg and Biesta 2010). Thus, schooling may use coercive means to set the learning goals and values for students, with the ethical justification that such coercion is good for the individual because it will lead to the capacity for autonomy later although the practice and experience of autonomy are lacking, making the end capacity doubtful. Conventional educational institutions often do not allow a pedagogical practice with autonomy on the presumption that students' mistakes and failures resulting from the exercise of their autonomy will reduce the students' capacity for autonomy later on.

To begin with, for the state to foster children's development of autonomy requires coercion – i.e., it requires measures that prima facie violate the principles of freedom and choice... The fear is that children who are permitted these freedoms, to choose their own friends without any guidance, for example, or to 'hang out' whenever and wherever they wish – run the risk of making choices that in the end reduce their capacity for student autonomy and its development. Even the twin virtues of transparency and publicity, so vaunted by liberals at every stage of government legitimation and action, are thought to be justifiably modified at times in relation to childhood education for autonomy (Levinson 1999, p. 38; also see, Nussbaum 2010).

In contrast to Kant, Mill (1865) argued that a rational social consensus should not permeate too far into individual consciousness and thus destroy difference and its inherent potential for innovation. Berlin (1969) and Hayek (1994) suggested that liberty was better protected by boundaries against its extreme forms of abuse, rather than defined by a rational consensus of what it means, which they felt otherwise would result in some form of totalitarian mediation of individuals by society as a whole. That is, whether an individual was to be exclusively governed by natural and external causes, iron logic, or even necessities, the notion of responsibility would collapse, as well as the possibility of important aspects of agency that Mill (1865) suggested are essential for a society to transcend itself. There is a tension then between a desire for emergent unknown social relations and practices on the one hand, and a desire to stabilize, regulate and systematize them, and thus impose them upon our collective selves on the other.

Our Approach to the Conceptual Researching of Agency

We began to systematically develop and compare categories of diverse uses of agency in education to what we think is saturation (cf. "grounded theory", Glaser and Strauss



1967). We cannot guarantee that there are no other approaches to agency. We might have missed some, or may have categorized projects in ways readers will disagree with. We invite readers to argue with our conceptions, placement of practices, or clarify new categories where ours are insufficient. We hope this continues to be a work in progress. We hope that others will continue to conceptualize the meaning of agency in differing educational contexts. For our purposes, the criterion for our analysis of agency focused on who owns and determines the endpoints of learning in the differing educational contexts. The focus on endpoints as a marker of agency is not the only aspect of agency we might have based our conceptual map upon. There are many important aspects of agency that might be argued for their importance and relevance to the life of a person, yet, for us, this criterion defines the crucial difference between being a subject and an object of education. We categorize these ideological approaches as instrumental, effortful, dynamically emergent, and authorial. Our goal was to abstract diverse normative approaches to agency. When we discussed some scholars, we focused on their particular contribution to a particular normative type of agency. We did not try to map these diverse scholars on our present map (which can be an interesting project outside the scope of this paper).

This "map" of the concept of agency that we present here is authorial and unique, which means that other researchers⁵ did and will come with alternative conceptual maps of agency based on their interests, contexts, practices, and philosophical orientations. The literature using the concept of agency is vast. Our analysis is limited by our interests in particular ontological and authorial dialogic pedagogy⁶ (Matusov 2009; Matusov and Brobst 2013), by our oppositions to the existing mainstream and innovative educational practices and theories, and by our ignorance. What may be relevant literature with regard to the concept of agency for us may not be for others, and vice versa. Paraphrasing Protagoras, we argue that a person "is the measure of all things" and not a research method that exists outside of a particular research and particular researchers. We did not have any "method" in our analysis of the literature except what patterns emerged in us while reading it and while being concerned with issues in education (hopefully, these concerns will become clear for the reader while reading our paper). The validity of our map, based on our personal/professional biases, will be tested in a public internally persuasive discourse, in which our authorial judgments will be challenged by diverse vista such as its diverse usefulness, relevance, logic, aesthetics, and so on. We reject a traditional, modernist, consensus-based notion of objectivity in social sciences, according to which there is an "objective method", following of which any researcher will come to the same result. We do not believe that dealing with social or human phenomena, researchers can be mutually replaceable or

⁶ Dialogic pedagogy involves a family of pedagogies emphasizing the importance of dialogue. Ontological dialogic pedagogy is based on the Bakhtinian premise that meaning making process is essentially dialogic (Matusov 2009; Sidorkin 1999; Wegerif 2007).



⁵ See an alternative conceptual mapping of the concept of agency (Hitlin and Elder 2007), which probably constitute diverse modes of what we call here "instrumental agency" defined by diverse content of the human capacities. Discussion diverse mapping is outside the scope of this paper.

truth is based on a consensus among relevant others (cf. Bakhtin 1986; Latour 1987; Matusov and Brobst 2013). Instead, we are searching for dialogic and authorial, bias-based approaches to science-making rooted in "internally persuasive discourse" (Bakhtin 1991; Matusov and von Duyke 2010).

Categorizing Normative Agency in Education

Instrumental Agency as Capacities

Instrumental agency focuses on human mastery; having the capacities to do and accomplish something successfully (Edwards and Mackenzie 2005, p. 294), "generalized capacity... to get things done" (Parsons and Smelser 1956, p. 181). In this approach, agency is viewed as an instrument for the activity's success and nicely fit into a technological framework of education (Matusov 2011). We call this approach instrumental because agency is viewed here as a tool to do something socially valuable, and predefined in advance. Probably the most famous example of the instrumental approach to agency is the Kantian universal rationalism. For Kant, instrumental agency was a tool for making a person capable of rational objective decisions autonomous of any influence by an authority and subjugating the person's will for these rational decisions. The goal of education for Kant seems to (re) produce rational people who will have this instrumental agency.

Often instrumental agency is viewed individualistically, independent of any social support, e.g., "an actor's ability to act independently of the constraining power of social structure" (Campbell 2009, p. 407). However, there have been efforts among some scholars to move away from an exclusive focus on selfcontained (individualistic) instrumental agency towards a relational form of instrumental agency (Wertsch 1995). A notable exception is the work of Edwards and Mackenzie (2005) who define relational agency as "a capacity to offer support and to ask for support from others ... one's capacity to engage with the world is enhanced by doing so alongside others" (p. 294). Relational instrumental agency involves "a capacity to engage with the dispositions of others in order to interpret and act on the object of our actions in enhanced ways" (Edwards and D'Arcy 2004, p. 147). "Relational agency is therefore based on a fluid and open-ended notion of the ZPD⁷" (p.150) but the ideas of relational agency within the context of instrumental schooling did not mean much: "for this [...] teacher the mutual support and joint learning among pupils that she wanted to encourage was constrained by the need for curriculum8 coverage and individual pupil performance. That is, a capacity for relational agency was not the experienced object of her activity as a teacher" (p.151). Skills - based education, standardization, and benchmarks are there to measure the instrumentalist approach. This notion of relational agency remains instrumental within a standardized context. Though humanistic and relational in intent, we believe these goals are hollowed out when students are coerced into

⁸ Curriculum is a pedagogical term defining the content of learning, instruction, or education.



⁷ The zone of proximal development — a Vygotskian term (Vygotsky 1978).

developing these capacities in classroom contexts that emphasize reaching predetermined curricular endpoints. Thus, in our view, relational agency does not stand out as being different from our notion of agency predicated on the criterion of determining the endpoints of learning. Whether one conceives of agency as individualistic or relational is not the deciding factor in promoting agency, in our view. Whether individuals develop the ends together or separately, the exercise of their agency will be constrained by a context predicated on an instrumental approach.

In an instrumental approach to agency, agency serves goals and desires that are bracketed from the notion of agency itself (Kohn 2014). Instrumental agency is independent of student's diverse goals, desires, and motives. As Mill noted, agency is dependent on individual differences and thus supports as yet unknown goals and practices. Using Aristotelian terminology, instrumental agency views practice as poïesis, in which the goals and the quality of a given human activity is preset in advance of the activity itself (Aristotle 2000). This concept lies in contrast to praxis, in which the goals and quality of human activity emerge within the activity as people carry it out (Carr 2006). Its assumption is that human is in charge and able to carry out any activity sought through. In praxis, goals and capacities are inseparable and emergent in the activity itself, which means an agent determines the goals and this collapses the enactment of instrumental agency, and reveals its instrumental quality by comparison.

Conventional schools often focus on transferring to students a powerful toolkit of essential cultural knowledge, attitudes, and skills — e.g., the ability to read, knowing important historical events and algebra, being punctual, — so the students can use it skillfully for their own future goals, desires, and motives or on request of others (Dewey 1956). Since school-aged children are not considered rational-responsible subjects, students' goals, desires, and motives are often dismissed and are not taken for consideration as important for learning, even often viewed as distracting to school learning (Matusov 2011). Matusov (2011) criticizes the compartmentalization of a person's goals, desires, and motives in separation from the notion of agency in education because what defines what is a tool and what is knowledge is mediation of the person's goal (Köhler 1973). Without the goal, mediation and, thus, tool/knowledge/sign collapse. Of course, even in conventional schools that ignore students' goals, the students do not remain goalless. In conventional school practice, the omnipresent goal of the student is to follow the hidden curriculum (i.e., to please the teacher, accept imposed values and learning) regardless of what is taught in the curriculum. Through hidden curriculum and rules, students' subjectivities are constructed towards the conceptions of good and bad, preset by the teachers and/or the curriculum designers in advance. Classroom mediation of this goal leads to procedural, rather than conceptual, learning (Hiebert 1986). This means that student effort is spent searching for and recognizing the pattern of actions that will lead to the teacher's approval or to pleasing the teacher. The future goals and aims of education are measured by the set standards ahead of the time, predicated upon skills deemed as necessary by "expert" adults.

Some innovative education tries to address this problem of procedural learning by exploiting students' current goals. Thus, in Progressive innovative



education, ⁹ the students' current goals, desires, and motives are important for connecting to the preset societal curricula— again a powerful toolkit of essential knowledge, attitudes and skills. Students' current interests are used to "psychologize" the preset societal curriculum (Dewey 1956). In our judgment, exploitation of students' current goals, desires, and motives in Progressive innovative education may work for a while — until students notice this exploitation of his/her desires, interests, and goals — that the teacher cannot support their goals and interests but rather has to teach preset curriculum. The conflict between the students' goals and imposed societal curriculum is unavoidable in Progressive education paradigm because of this compartmentalization of student agency.

Effortful Agency

Effortful agency focuses on the individual having a strong enough desire and commitment to carry out an action preset in advance, "an actor's ability to initiate and maintain a program of actions [despite internal and external resistance]" (Campbell 2009, p. 409). In a conventional formal schooling educational context, effortful agency is about how to make students willingly study and learn the curricula preset by society in a sustained and energetic manner. It focuses on students willingly embracing the values promoted by the community, and is an insightful means to attempt to overcome the problem of procedural learning that tends to occur in conditions of instrumental agency. An excellent example of this concept of agency was found on the website of a school expressing their updated goals for students' agency:

Through the tenets of "agency," we can help students see effort and practice in a new light and associate both as growth paths and, ultimately, success. We can provide students with the skills to rebound from setbacks and build confidence as they welcome new challenges. Instilling the principles of "agency" helps students find personal relevance in their work and motivates them to participate actively, build relationships and understand how they impact themselves and their communities (Dobyns 2013, July 31).

We have found three major types of effortful agency in the literature. One form of effortful agency involves the issue of motivation: how to socially generate the desired motivation in the individual. From the work of Freud (1933), Vygotsky (1978), and Deci and his colleagues (e.g., Rigby, Deci, Patrick, and Ryan 1992), there has developed a sophisticated theory of how to achieve the internalization of socially desired motivation by individuals. Deci and his colleague define 4 phases of extrinsic motivation that progressively lead to autonomous self-determination:

- 1) external regulation by punishments and rewards,
- 2) introjected regulation by duty and guilt,

⁹ Progressive education involves utilization of students' past and present experiences for meaningfully teaching curriculum predefined by the society (Dewey 1956).



- 3) identified regulation by personal importance, ¹⁰ and
- 4) integrated regulation by a harmonious negotiation between person's wants and somebody else's demands. 11

The acme of motivation development is intrinsic motivation that is seen as autotelic (i.e., a person generates goals for him/herself and nobody else) and non-instrumental (i.e., a person involves him/herself in the activity primarily for the sake of the process and not for its outcome). In our view, this motivation-focused effortful agency is another form the Progressive education paradigm capitalizes on with the aim to make school learning and curriculum preset by the society (Dewey 1956) likeable and desirable for all students all the time (Greenberg 1991). Effortful agency is achieved in Progressivism by providing constrained choices, open-ended activities, activation of prior knowledge, and connection to (exploitation of) students' existing goals and desires for learning to socially guide students towards the ends of the preset societal curricula. In the Progressive education based on the motivation of effortful agency, students should passionately want what the teachers want them to want. 12 Using Foucault's analysis of power for analysis of the Progressive education, students are subjectified, they are viewed and made into "educated subjects" ready to be governed and managed (Fendler 1998). Their autonomy and agency are normalized and domesticated (Kohn 2014). As Osberg and Biesta (2010) suggest, in Progressive education, students lose control over the development of their own final subjectivities.

The second aspect of effortful agency involves the issue of will when desire/motivation is already present: how to preserve the individual's desired action in the face of some internal and external adversaries. Illustrative of this effortful approach to agency is Bandura's (1986) concept of self-efficacy, "people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performances" (p. 391). Although self-efficacy is defined through special

¹² Consider for example research on "self-directed learning", in which students' "self-directed learning" is embedded in the teacher's assignment and overall teacher-preset curriculum, "Benware and Deci (1984) studied college students' learning using a directed-learning paradigm. These researchers found that subjects' self-reports of interest in assigned material, enjoyment of the material, and active involvement in learning covaried with their conceptual understanding of the material. Because the self-report variables reflected subjects' sense of autonomy and self-regulation in the learning process, this study provided further indication of a positive relation between autonomy and conceptual learning" (Rigby, et al. 1992, p. 173).



¹⁰ "An example of an identified regulatory process might be students who prepare very hard for the college entrance examination because going to college is personally important to them. These students study hard because doing well is instrumental for an important self-selected goal. The behavior is extrinsically motivated because it is instrumental, but it is relatively autonomous-because of the person's having identified with its value and regulation" (Rigby, et al. 1992, p. 170).

¹¹ "For example, a parent might identify with being an authority figure as well as being a friend to his or her children. These two roles may be equally valued, and they may seem to conflict, but the roles can become integrated through a "creative synthesis" that allows the parent to fully accept and care for the child while at the same time setting limits for his or her behavior. In such cases the two values could co-exist harmoniously with each other and with other aspects of the self, thus not causing psychological stress for the individual. This form of regulation represents the endpoint of internalization and-is indicative of the most mature-regulatory style. When a regulation has been-fully -integrated, the person is less likely to feel controlled even by relevant coercive forces in the environment, instead experiencing those forces as information relevant for-making choices. According to self-determination theory, an integrated regulatory style is the most volitional, autonomous form of extrinsic motivation. Together with intrinsic motivation, it represents the basis for self-determined functioning, which in its fullest sense is characterized by a total involvement of the integrated self" (Rigby, et al. 1992, p. 171).

human capabilities such self-control, coping with obstacles, persuasion, decision making, assessment and so on — which may evoke the notion of capacities in the instrumental approaches to agency, self-efficacy capabilities are different from capacities of instrumental agency. Capacities of instrumental agency focus on the content of the socially desired mastery (e.g., capacity for an individual to arrive at universal rational decision or judgment, for Kant). In contrast, self-efficacy capabilities focus on the will to execute preset action. The content of the action is known, unproblematic and peripheral to the notion of will-focused effortful agency. The issue here is how the individual can execute his/her preset known action amid diverse internal and external obstacles that face this action, "Perceived self-efficacy helps to account for such diverse phenomena as changes in coping behavior produced by different modes of influence, level of physiological stress reactions, self-regulation of refractory behavior, resignation and despondency to failure experiences, self-debilitating effects of proxy control and illusory inefficaciousness, achievement strivings, growth of intrinsic interest, and career pursuits" (Bandura 1982).

This is a notion of agency as ultimately residing in human cognition. Similar to Bandura's notion of self-efficacy is Vygotsky's notions of "the zone of proximal development" and "self-regulation" (Vygotsky 1978) that also tries to address the issue (of the development and nature) of the human will through cultural signs and tools of mediation. Based on the work of German Gestalt psychologists (Köhler 1973), Vygotsky believed that individuals are controlled "primarily" and "naturally" by their environment through "psychological fields", "affordances", or even through unconditional and conditional reflexes. Mediation through cultural tools and signs helps the individual go against the powerful forces of the environment and regain control of his/her own behavior. Vygotsky argued that mediation liberates an individual from the power of the environment and the capricious impulses of the individual's own body and psyche. Thus, for Vygotsky, mediation by cultural tools and signs ¹³—self-regulation—is the marker of effortful agency. We argue that this agency is a will-based effortful agency because the individual's desire is already assumed to be present and non-problematic in the notion of self-regulation. ¹⁴

The third type of effortful agency is focused on people's commitment to their action. In his early writing, Bakhtin (1993) briefly introduced and defined a commitment-based effortful agency as placing one's personal stamp on a deed to take responsibility for it, a notion similar to signature,

It is not the content of an obligation that obligates me, but my signature below itthe fact that at one time I acknowledged or undersigned the given acknowledgment. And what compelled me to sign at the moment of undersigning was not the content of the given performed act or deed. This content could not by itself in isolation, have prompted me to perform the act or deed-to undersign acknowledge it, but only in correlation with my decision to undertake an obligation-by

¹⁴ However, mediation often transforms the individual's desire. Thus, Kohler demonstrated in his experiments with apes that when an ape tries to get a banana located out of direct reach from the cage, she may start looking for implements — a new, emergent, desire as a result of search for mediation — that may help to reach for the banana.



¹³ Especially sign because as Vygotsky argued tool is primarily directed at the environment and secondary on the individual him/herself, while sign is primarily directed at the individual and other people.

performing the act of undersigning- acknowledging. And in this performed act the content-aspect was also but a constituent moment, and what decided the matter was the acknowledgment or affirmation-the answerable deed-that had been actually performed at a previous time, etc. What we shall find everywhere is a constant unity of answerability, that is, not a constancy in content and not a constant law of the performed act (all content is only a constituent moment), but a certain actual fact of acknowledgment, an acknowledgment that is once-occurrent and never-repeatable, emotional-volitional and concretely individual (Bakhtin 1993, pp. 38–39).

Signature goes beyond mediation for self-regulation (although it serves this purpose as well). Agency commitment through a signature is always "half social and half personal" (cf. Bakhtin 1986) obligation calling for personal responsibility. By putting his/her signature after his/her action, a person accepts both potential challenges by others about the action and duty to answer to these challenges. The personal signature signifies (please notice the similar root of these terms) the personal agency and ownership behind the action. By placing his/her signature, the person acknowledges that the action does not just happen to the person, it is not causal, it is not forced, it is not reactive, it is not a natural outburst one's body and psyche, it is not capricious, it is not arbitrary, it is not temporary, it is not provoked by others or by circumstances — but the person's own action. Thus, the person's action is deliberate, intended, and responsible. Through the signature, the person says, "It's me, who did it. And I'm willing to stand by my deed." Before the signature is placed after the action, the action is only partially agentive (or even not at all in some cases, falling into an undeliberate and unintended, if not even counter-intended, behavior). The signature makes the action fully agentive. It transforms an individual's action into a personal deed, "It is not an action, not a behavior anymore — but a deed!"

In education, there is evidence of application of the commitment-based effortful agency. There are growing attempts to engage students (and teachers) in signing "learning contracts" (Knowles 1986) about their learning, "A learning contract is a collaboratively written agreement between a student and a faculty member that delineates what is to be learned, how it will be learned, and how that learning will be evaluated" (http://www.wpi.edu/Academics/ATC/Collaboratory/Idea/contractbenefits. html). In our assessment, the learning contract practices are consistent with the Progressive education paradigm of manipulating an "educated subject", in which students are put into a position, in which they acknowledge goals, values, and limitations tacitly imposed on them by teachers as their own. In essence, we argue that learning contracts create an illusion of freedom of choice and negotiability in the students, but govern them by guilt that necessarily emerges in students when they have transgressed "their own" signed contract. Non transparent imposition is achieved through the many non-negotiable features of the contract that are often not discussed with the students such as: the compulsory nature of K-12 education, forced class attendance, the presence of summative assessment (grades), the signing of the contract (usually all students must do it), the academic subject matter of the class, the presence of the teacher, the vote power of the teacher in defining "learning" and "instruction", and so on. Studying learning contracts, Wald came to a conclusion that it creates the illusion that "the environment that emerged is compatible with a student-centered



philosophy" (Wald 1978, p. 223). In our view, what makes it specifically "student-centered" is that the responsibility for enforcing education imposed on the students by the society is shifted from teachers to students through self-crimination. Arguably, learning contracts signed by students help to transfer the external policing and surveillance power, which is usually enacted by teachers, school administrators, and parents, into the internal psychological policing and surveillance power enacted by the student him/herself through a feeling of guilt and betrayal, or an otherwise satisfaction of contractual accomplishments. Through learning contracts, signature, and "management by guilt" (Hargreaves 1994), "it has become possible to govern without governing society – to govern through the 'responsibilized' and 'educated' anxieties and aspirations of individuals and their families" (Rose 1999, p. 88). Internal policing and surveillance are arguably more effective than external ones.

Bakhtin's keen stress on effortful agency as being independent from the content of the person's action characterizes all types of effortful agency. While instrumental agency is practice-specific, effortful agency is practice-generic. As Bandura insisted, self-efficacy "involves a generative capability in which component cognitive, social, and behavioral skills must be organized into integrated courses of action to serve innumerable purposes" (Bandura 1982, p. 122).

We see - this separation and independence of effortful agency from the content of its action (or deed), and the pre-existence of the content of action before agency as very problematic. Just as in the case of instrumental agency, effortful agency views practice as *poïesis*, in which intent, goal, quality, motivation, perseverance, commitment, and responsibility pre-exist the practice and do not emerge in the practice as in *praxis* (Aristotle 2000). It seems to imply a social and political division of labor, in which the majority of people are involved in *poïesis* conceptualized and governed by instrumental and effortful agency, while a minority of people are involved in *praxis* that requires an integrated notion of agency, in which the content of action, intent, goal, quality, motivation, perseverance, commitment, decision-making, definition of goal and value, and responsibility are inseparable.

Dynamically Emergent Agency

Dynamically emergent agency focuses on a dynamic emergent process that brings something new, innovative, and creative. This dynamic process may have diverse but related roots: affordances (Gibson 1979), interactionism (Mead 1956), self-organization (Lemke 1995), dynamic processes theory (Fogel 1993), reflexes of behaviorism (Skinner 1976), chaos theory, actor-network theory (Latour 1996b), and so on. We see the attraction of many scholars to this approach for its holism, monism, materialistic and distributed nature, and anti-mentalism. It allows talking about emerging collective agency, agency of bureaucracy, non-human agency of animals, agency of distributed machine-human network, agency of Internet, and so on. It is corporeal in the sense that it allows the studying of the interaction between material and human, and at times the biological basis of creativity and innovation, often viewing symbolic processes as a reification of dynamic emergence. For example, it focuses on



material affordances for new actions.¹⁵ In education, this approach to agency does not seem to be strong or widespread but it can be found in some ecological approaches. For example, Sidorkin (1999) processed "the 3-drink theory of discourse", according to which a natural discourse may have different developmental phases with regards to its sharp versus diffused foci and topical homogeneity versus heterogeneity. Another example can be found in the work of Sugata Mitra who discusses the "self-organizing" action of children when presented with scarce resources for their learning (Mitra 2006).

Similarly, though influenced more by sociological theories of practice (cf., Pickering 1995) and less predicated on naturalistic science- researchers argue that differences in context place different demands on participants, which in turn demands and develops different competencies. For instance, in mathematics instruction, "While the task structure of course does not determine how students interact with the content, it provides a framework that shapes the kinds of agency that are most accessible to students as they move productively through the task or resist being engaged in the task" (Gresalfi, Martin, Hand, and Greeno 2009, p. 67) see also Krange (2007), and in science, Boaler and Greeno (2000). This reminds us of Berlin's and Hayek's notion of "negative liberty". Negative liberty involves focusing on constraints for agency that may enable or disable its creativity, without shaping it in a certain preset mold. These libertarian ideas are used in some Democratic Schools that collectively (students and teachers) build a procedural democracy for the school government (Rietmulder 2009; von Duyke 2013).

In our view, dynamically emergent notion of agency can be useful for analysis and the design of agency constraints ("negative liberty"), affordances, and material for agentic creative possibilities (as we will discuss it in the next section). However, there are at least four related problems with the dynamically emergent concept of agency. The first problem is that (or can be) the dynamically emergent agency describes what really might be called agency without an agent. In this approach, agency is a zombie without a soul. Dynamically emergent agency remains "it" and not "I", "you", "we", "she/he", or "they". A second related problem is that the dynamically emergent agency cannot be addressed or replied to — it does not have any dialogic quality. The third problem is ethical — the dynamically emergent agency does not have any responsibility for its innovations, new patterns, and creativity. Finally, a fourth problem is that the dynamically emergent approach to agency implies and smuggles an unproblematic hidden observer who notices and recognizes it as something important and worth labeling as "agency" in an otherwise indifferent flow of life and world changes. We do not deny the importance of self-organizing dynamic emergent processes, especially those that humans are thrown into and have to reply to humanely but we question referring to these processes as "agency" — these processes can be the material for

¹⁶ Cf. the recent US Supreme Court decision to give a corporation the same rights and recognition as to a person-citizen. For more information on the corporate personhood in the USA and the Supreme Court decision see https://en.wikipedia.org/wiki/Corporate_personhood.



¹⁵ See a debate on gun control in the US. The National Ruffle Association famously opposed to gun control by appealing to individual agency of people, "Guns don't kill people — people kill people," while many studies show that availability of guns promotes tragedies even against people's desires at times (Latour 1996a). In our view, the notion of authorial agency defined as transcendence of the given reconciles this contradiction acknowledging both affordances of the diverse given and personal responsibility of transcendence.

authorial agency (see below) or provocations of it. At best and this still needs its own investigation, these dynamic emergent processes may be considered as some form of proto-agency bidding for agency.

Authorial Agency

Authorial agency focuses on the production of culture, which is the individual's unique culture making activity on both larger, more recognizable, and smaller, less recognizable, scales. Osberg and Biesta (2010) suggest schools ought not seek to enculturate student subjectivities in any preset mode (i.e., reproduction of culture) but to aid students in defining and empowering their agency to be unique as individuals. Underlying the notion of uniqueness has often been a recognition that it can lead to innovation and the potential for societal change. The notion of authorial agency is contested, evaluative, discursive, dialogic, and ethical (Davies 1998). It involves addressivity, responsivity, answerability, and responsibility. Thus, Matusov (2011) has argued that agency is best defined through socially recognized personal transcendence of the given — a person's transcendence of the given recognized positively and/or negatively by others and by the self, "the subject desires recognition from another and is constituted through this recognition... The gaps embedded in repetition are, for Butler, the location of agency" (Clare 2009, p. 51).

Our concept of authorial agency can be tracked down back in the work of such theologians as Spinoza (1910) and a medieval German monk Nicholas from Cusa (1954) who investigated the concept of God as agency in its pure and unlimited form. Moreover, in works of postmodern thinkers such as Deleuze and Guattari (1987), humans are seen as the part of constant *becoming* (cf. also "ideological becoming" in Bakhtin 1986).

In our view, this authorial concept of agency can be also deduced from the writing of several current sociocultural scholars. Thus, Lave and Wenger (1991) have developed notions of "community of practice" and "legitimate peripheral participation", moving away from a traditional view of learning as reproduction of culture. Lave and Wenger show that through newcomers' socialization in the existing practice, the practices are often changed. From their point of view, learning involves not acquisition of preexisting knowledge and skills but rather active transformation of social relations and the emergence of new unique forms of participation. Also the concept of "transformative agency" introduced in the cultural-historical activity theory analysis of the adult workplace (Engeström 2006; Haapasaari, Engeström, and Kerosuo 2014; Virkkunen 2006) seems to be somewhat similar to our notion of authorial agency. Transformative agency expands on the work of Vygotsky and Activity Theory developed by Leont'ev, Davydov, and Engeström. The technological revolution has provoked the need for agency from adult workers and the goal of their joint activity is to recognize, formulate, address, and solve problems in the workplace. Contradictions and challenges in the workplace necessitate joint effort at change, "New qualitative stages and forms of activity emerge as solutions to the contradictions of the preceding stage of form. This in turn takes place in the form of 'individual breakthroughs', innovations from below" (Engeström 2006, p. 28). Engeström notes this change stimulates or makes new demands on the development of its participants. Virkkunen's (2006) research suggests that transforming the workplace develops dilemmas and these provoke transformation



among participants. Similarly, Haapasaari et al. (2014) suggest workers experience transformative agency that "stems from encounters with and examination of disturbances, conflicts and contradictions in the collective activity. Transformative agency develops the participants' joint activity by explicating and envisioning new possibilities. Transformative agency goes beyond the individual as it seeks possibilities for collective change efforts" (Haapasaari, et al. 2014, p. 2). Critical analysis of the practice by workers changes the context of worker's activity. However, in our view, the notion of transformative agency with its reactive nature misses its dialogical and ethical initiative, and the creative emphases evident in our concept of authorial agency. It places the notion of transformative agency somewhat in-between the dynamically emergent agency and the authorial agency.

We see several important theoretical benefits in the notion of authorial agency. The authorial notion of agency resolves the dichotomy of the given vs. the innovative because the given serves as the material for transcendence. Transcendence cannot occur in a vacuum without traditions, ready-made culture, existing practices, available materials, established relations, history, necessities, natural causes, affordances, structures, habitus, circumstances, and so on. Authorial agency is not absolute freedom from the natural causes, necessities, ready-made culture, social dynamics, nature, and iron logic but rather it uses these as the material of and opportunities for particular transcendence. Without certain givens, particular forms of creative transcendence may not be possible. The given shapes agency by situating agency, and by providing the material for transcendence. In the process of socially recognized transcendence of the given culture and practice, new goals, new definitions of quality, new motivations, new wills, new desires, new commitments, new skills, new knowledge, new relationships will emerge, "Men make their own history, but they do not make it just as they please; they do not make it under circumstances chosen by themselves, but under circumstances directly encountered, given and transmitted from the past. The tradition of all the dead generations weighs like a nightmare on the brain of the living" (Marx 1964, p. 15). It is similar to poststructural feminist ideas that agency becomes "a freedom to recognize multiple readings such that no discursive practice, or positing within it by powerful others, can capture and control ..." (Davies 1998, p. 51). In short, authorial agency treats practices as praxis — an activity in which its goals, values, definition, and quality emerges in the activity itself and does not preexist it (Aristotle 2000).

The concept of authorial agency also addresses the dichotomy of the individual and the social as the transcendence has to be recognized by relevant others and/or by the self. This recognition calls for dialogicity and responsibility. A bid for the social recognition of the person's transcendence of the culturally given transforms an individual's action into a personal deed and the act of individual transcendence into a social event changing the social relationships in the communities and the society.

Yet, in our ethical view, authorial agency is always personal and cannot be collective because responsibility — the ethic stand — is always personal and cannot be collective. Bakhtin's (1993) ethical insistence on "no alibi in being" precludes a personal excuse to delegate personal responsibility to a collective or any difficult circumstances, although they provide material for authorial agency of socially recognized transcendence of the given collective or circumstances. Thus, from this point of view, the recent decision by the US Supreme Court to grant the legal right of a person to a corporation is masking the personal responsibility of the leaders of the corporation. Thus, a corporation can



contribute the same amount of money as a person to a political campaign. Similarly, any diffusion of personal responsibility by technology, social dynamics, affordances, and/or organizational bureaucracy is reduction of the human authorial agency to mere acceptance of this diffusion (at best) and a complete loss of agency and personal responsibility (at worst).

The notion of authorial agency defines the human nature. The US economist philosopher James Buchanan argued that the key difference between Homo Sapiens and their biological relatives lies in human creativity, unpredictability, and (authorial) agency. Buchanan gave a hypothetical example of a dog whose behavior is much more predictable than human behavior. Using language and other artifacts, a human can transcend the conditions of his/her being "within constraints" of what is available while a dog cannot, "I shall call my dog a 'natural' animal, and I shall call anyone of us a 'natural and artifactual' animal, or, perhaps preferably, an artifactual animal bounded by natural [and cultural – the authors] constraints. We are, and will be, at least in part, that which we make ourselves to be. We construct our own beings, again within limits. We are artifactual, as much like the pottery shreds that the archaeologists dig up as like the animals whose fossils they also find" (Buchanan 1979, pp. 94–95). This resonates with Boesch's characterization of the human nature, "...a main trait of human reality is to transcend itself..." (Boesch 1993, p. 15). Buchanan argues that a standardized predictable behavior "contradicts the notion of individual liberty and that of individual responsibility of the choices made" (p. 110).

Buchanan emphasizes that what makes human beings human is becoming, i.e., transcending the given, while using the given as material for his/her transcendence and self-transformation, "the prospects of becoming are sufficient to channel action, to divert resources away from the automatic routine [and ready-made knowledge- the authors] that utility maximization, as normally presented, seems to embody. And choices made in becoming a different person are irrevocable, regardless of their productivity, when viewed ex post. We move through time, constructing ourselves as artifactual persons. We are not, and cannot be, the 'same person' in any utilitymaximization sense" (p. 100). In this process of becoming (cf. Bakhtin's notion of "ideological becoming", see Bakhtin 1986; Morson 2004), the quality of what is considered good and valuable undergoes transcendence and transformation itself. "Individually, persons must recapture an ability to imagine themselves capable of becoming 'better' persons than they are. But the ranking of prospects requires valuation" (p. 105). Buchanan defines the place of education in human society in the following way, "The role of education is to provide persons with both an array of imagined [ready-made - the authors] prospects and some [ready-made - the authors] means of valuation" (pp. 105-106) as the base materials for the persons' immediate, not postponed, becoming, transcending, and transformation. The imagined future, goal, and design provides only a provocation for becoming a different person with different desires, visions of the world, and values rather than molding in a teleological way a definite and preset shape of human activities onto the same person,

If man can envisage himself as a product of his own making, as embodying prospects for changing himself into one of the imagined possibilities that he might be, it becomes relatively easy for him to envisage changing the basic rules of social order in the direction of imagined good societies. In doing so, however,



nothing teleological can be introduced since man must recognize that even within his own private sphere of action there is no maximand. Individually, man invests in becoming that which he is not. Collectively, men agree to modify the artifactual rules within which they interact one with another so as to allow individualized pursuit of whatever men may choose (Buchanan 1979, p. 110).

Buchanan argues that in economy, a person does not want liberty to maximize his/her pre-existing utility as conventional economic theories suggest, but rather a person wants liberty to open opportunities for his/her becoming, transcending, and creative transforming, "Man wants liberty to become the man he wants to become" (p. 112) even though who the person wants to become is changing through this process of becoming itself. If we apply this principle to education, we can conclude that the purpose of education should be not be to prepare students for the teacher's and the society's known- or expected-past, but rather for students' unknown future. Thus, education should be "a dialogue between the child and his [unknown – the authors] future; [it should not be – *the authors*] [...] a dialogue between the child and an adult's [known – *the authors*] past" (Griffin and Cole 1984, p. 62). Of course, in the authorial concept of agency, the given past is the material for agentive creativity.

We argue that the notion of authorial agency is omnipresent in human life penetrating its all aspects and sphere, including even apparently oppressive and "non-creative" ones. Thus, Matusov (2011) defined the concept of authorship as a particular manifestation — shape, form, pattern — of authorial agency. He argued that in conventional monologic schools based on a technological pedagogy¹⁷ the main forms of students' authorship involves the teacher pleasing authorship and the resisting authorship (but not only these two). Matusov argues that the paradox of the teacher pleasing authorship is students' use their authorial ability to mask their own creativity from the teacher and often themselves. He defines the teacher pleasing authorship as "creative contributions by the student to anticipate and please the teacher's desires" (Matusov 2011, p. 29) and elaborates on the paradox, Although it can be easier to envision students' authorship in their resistance and initiative to do something beyond the teacher's demands, it might be less clear to see students' creative transgression and improvisational extension of any limits in their willing obedience to and unconditional cooperation with the teacher's assignments (in a broader sense of this term; see above). "Creative unconditional obedience" sounds like a misnomer but it is not. A student's sophisticated ability to understand any arbitrary teacher demands, submit to teacher-driven assignments, and foresee the criteria that the teacher uses to define success requires creativity from the student. However, this creativity is a peculiar and perverse one, denying its own value. It is creativity on how to be non-creative. It is agency creatively striving to act as a willing non-agency and creatively pretending to be an instrument and machine (p. 29).

¹⁷ Matusov (2011) defines technological pedagogy as education aiming at making students predictably arrive at preset curricular endpoints (i.e., educational standards).



Matusov argues that technological pedagogy, aiming at making all students arrive at standardized curricular endpoints, preset by the society, neglects if not actively tries to suppress authorial agency in students (and teachers) only to develop these particular, peculiar, and arguably distorted and paradoxical authorships of resistance and pleasing in this endeavor (Johnson 2003). However, he insists that these authorships are not very educational in their nature. One might also cynically argue that those students who can creatively please the teachers, suppress their own ideas, and produce what is asked of them, fulfill the educational intent ions of at least some of the hegemonic power groups influencing what counts as learning in schools (Blacker 2013).

Studying dialogic pedagogy, Matusov (2011) abstracted two main types of students' authorship while recognizing their ill-defined boundaries from each other:

- responsive authorship, in which "students develop the authorship in response to teacher-developed dialogic provocations that ontologically engage them in some inquiry through provoking responses that students are asked to justify and test against alternative responses" (p. 37) and
- 2) self-generated authorship, involving "the students' self-initiated inquiries, assignments, and learning journeys" (p. 37).

Matusov and Marjanovic-Shane (2012) argue that the notion of authorial agency is not without a problem in the context of education (and probably elsewhere). They evoke a case of tragic innovative pedagogy in California in the late 1960s, recently dramatized in the German movie "Die Welle" ("The wave" in German) (Becker, Gansel, and Thorwarth 2011). In this pedagogical experiment, social studies high school teacher Ron Jones decided to break away from the alienated learning of technological pedagogy in conventional schools and focus on promoting students' authorial agency. As the proposed topic of his social studies class was totalitarianism of Nazi Germany, the teacher skillfully invited the students to build a totalitarian Neo-Nazi community. The students' innovative transcendence in building a totalitarian community was highly valued and supported by the teacher and the peers. The community started rapidly growing and ended up with a tragedy (Jones 1972). The students were creatively transcending the existing ready-made culture and practices and were actively and skillfully making a new culture supported by the teacher but this culture, which they were certainly creatively making, was the culture of Neo-Nazi totalitarianism. This case has convinced Matusov and Marjanovic-Shane that just focusing on fighting alienated learning through promoting students' authorial agency is not enough in education without investigating and promoting critical dialogue with the content of its authorship.

Coda: Diverse Theoretical Approaches to the Notion of Agency in Education

The table below presents our conceptualization of 4 espoused approaches to agency that we have abstracted from educational and psychological literature (Table 1).



Table 1 Diverse normative types of agency

Type of agency	Definition	Pedagogical problem	Our main critique
Instrumental	Capacities: skills, knowledge, dispositions	How to equip students with important capacities	Desire-free
Effortful	Mobilization for action: motivation, grit, self-regulation, commitment	How to mobilize students for important actions	Content-free
Dynamically emergent	Self-organization: Agency without agents	How to constrain and support the emergence of agency in students	Responsibility-free
Authorial	Recognized transcendence of the given	How to recognize, respond, and address student agency	Danger of agentive irresponsibility

Conclusion: Authorial Agency in Education

We want to conclude our theoretical analysis of the notion of agency by applying the concept of the authorial agency to diverse pedagogical practices. As a reader may by now suspect, we subscribe to the notion of authorial agency as it ontologically returns to students all aspects of their agency. Our analysis of the concept of agency in education, which we take up briefly below but will discuss in more depth in our next paper, is guided by this concept. Based on our discussion of the existing definitions of the concept of agency and our observations on the pedagogical practices and theories so far we have abstracted four major approaches to authorial agency in education:

Postponement of Authorial Agency

In conventional technological education, students are expected to postpone exercising their authorial agency until they become fully equipped with the powerful cultural toolkit of essential knowledge, skills, attitudes, and dispositions (cf. instrumental agency) – i.e., after the education is fully completed. Student's agency is usually neglected if not actively suppressed by teachers because it represents a distraction from the preset curricula. Thus, learning is often alienated from the students' authorial agency. Occasionally, teachers may try to exploit students' authorial agency by engaging them into the prescribed curriculum but teachers often worry that things might get out of control and the students might hijack the lesson (Kennedy 2005) (cf. effortful agency). The technological approach to education sees its goal as the reproduction of the ready-made culture and in preparing students' future active participation in the ready-made culture. Many competing interests in the culture seek to domesticate students' authorial agency as a means to colonize education itself. Students are a secondary consideration whose agency, is valued only when it focuses on their effort:

Content knowledge and academic skills remain critical, but a growing body of research suggests students' attitudes and beliefs about learning, as well as learning skills, can have a powerful influence on their ability to excel—both



inside and outside the classroom.... Student agency is a cluster of academic mindsets and learning strategies that have been demonstrated to advance learning and achievement. Academic mindsets are more evident in students who feel a sense of belonging in a certain subject, class or school; believe that they have the capacity to learn, and see value in their participation. Learning strategies include study skills, meta-cognition and goal-setting, competencies that help individuals persist when learning becomes challenging (http://raikesfoundation.org/Secondary.aspx?file%3dGrantMiddleShift).

Domesticated Authorial Agency

In Progressive education, students' authorial agency is welcomed, valued, supported, and even targeted within the overall curricular goals pre-defined by the society and the societal definitions of what education is about, but nevertheless distrusts students' determining of their own educational ends, moral agency, and values. Kant himself promoted a progressive school model in his time (LaVaque-Manty 2006) with the idea to socialize student agency viewed as a values adoption toward teachers/school educational goals. The French writer and philosopher, one major founder of Progressive education, Jean Jacques Rousseau nicely, if not cynically, summarized the Progressivist approach toward students' authorial agency in his advice to a Progressivist teacher,

... let him [the student — the authors] always think he is master while you are really master. There is no subjection so completed as that which preserves the forms of freedom; it is thus that the will [of the student — the authors] itself is taken captive [by the teacher's hidden manipulation — the authors]. Is not this poor child, without knowledge, strength, or wisdom, entirely at your mercy? Are you not master of his whole environment so far as it affects him? Cannot you make of him what you please? His work and play, his pleasure and pain, are they not, unknown to him, under your control? No doubt he ought only to do what he wants, but he ought to want to do nothing but what you want him to do. He should never take a step you have not foreseen, nor utter a word you could not foretell (Rousseau 1979, p. 120, italics is ours).

Progressive education often provides many choices, learning contracts, discussions, diverse projects for their students to gently domesticate and discipline their "capricious" authorial agency and channel it into directions approved and predefined by the teachers and the society (Dewey 1956). It focuses on conditions and constrains that will lead to emergence of socially desirable agency (cf. dynamically emergent agency). Progressivists' insistence on careful pedagogical documentation of students' learning, activity, relations, and contributions discussed with the (Dahlberg and Moss 2005) students (as exemplified in learning portfolio) - while masquerading as gentler and more respectful means of assessment- seems also to contribute to surveillance, patronizing, normalizing, and subjectification of students' authorial agency so as to domesticate them towards society's ideas.

Unlike transformative agency in the workplace in which problems in the workplace experienced by workers is addressed by them and as a by-product, transformative



agency happens to workers themselves, in educational settings problem scenarios are sought after or designed by teachers in order to transform the students' agency, though in unpredictable ways. Some examples of "transformative agency" within school settings include an in school playworld activity in which a student expresses his agency initially as resistance and then through creative participation (Rainio 2008). The student's creative participation changes the teacher's narrative of him as a problem child into a dialogic being; one who allows a dialogic relationship to arise between his resistance and the class activity in such a way that permits him to experience his agentive power within the activity and in a classroom project to transform the city. Students experience their collective and individual agency as making a difference (in this case transforming biking in the local city environment) (Rajala, Hilppö, Lipponen, and Kumpulainen 2013). In both cases, teachers expect that the activity will act on the student and transform them in ways they have predetermined. For instance, Rainio's young student will use his agency to creatively contribute to a shared classroom activity, or Rajala et al.'s students will develop academic capabilities as a result of experiencing their agency in transforming the city. In both cases, the activity context is teacher defined for teacher's curricular ends, but within each project, students had opportunities for responsive authorial agency.

We see student agency compartmentalized by the teachers' frame – students have free action within it but are expected to endorse the teacher's ends – progressive teachers want students to want what they want them to want and students may exhibit a great deal of effort and authorial creativity in achieving those wants. It stills seem the major goal of education is active reproduction of the existing culture through students' current active and willing participation in the ready-made culture.

Free-Range Authorial Agency

We see the Democratic education movement exemplified by such innovative schools as Summerhill (Neill 1960), Sudbury Valley School (Greenberg 1991), The Circle School (Rietmulder 2009) and others such as Unschooled movements (Llewellyn 1998) as promoting students' spontaneous authorial agency within a framework of democratic self-governance. The focus of the Democratic education movement seems to be to support the students' creative socialization in the societal practices of the students' choices without their being any curricular imposition on them. The Democratic school is often viewed as "a scaled down society" (Rietmulder 2009). The concept of creative socialization in the societal practices seems to be consistent with Lave and Wenger's notions of "community of practice" and "legitimate peripheral participation."

Our critique of this pedagogical approach to authorial agency stems around a lack of exposure to societal practices that may not be immediately available to the students so the students cannot choose them (von Duyke 2013). Another problem that we see, which can see and which can be even more crucial, is a lack of guidance and critical dialogue. Although democratic self-governance of the Democratic education might not allow for tragic excesses of Ron Jones' pedagogical experiment, we are concerned that students' authorial agency around their creative socialization in the societal practices may remain uncritical. Democratic education apparently sees the major goal of education as students' actively becoming culture-making, "people of culture" here and now (Bibler 2009) through democratic governance and respect for the students' autonomy.



Education involves "scaled down" production of the wider culture without the inherent imposition of conventional and progressive school models.

Authorial Agency in Critical Dialogue

Recently with our colleagues, we have started developing a new pedagogical approach that we call tentatively, "Democratic Dialogic Education From and For Authorial Agency" (shortly DDEFFAA) (Matusov 2011). In this approach, we focus on promoting students' authorial agency through engaging them in a critical dialogue of testing their pre-existing or emerging ideas, perspectives, worldviews, perceptions, feelings, and so on against alternative ideas, perspectives, worldviews, perceptions, and feelings that may or may not be immediately available in the learning community through "internally persuasive discourse" (Bakhtin 1991; Matusov and von Duyke 2010). We promote not just creative socialization, democratic self-governance, and increased participation in the societal practices of the students' choices, but also *critical* creative socialization. In DDEFFA, not only students' self-generated authorship but also responsive authorship is promoted. The responsive authorship is promoted through teacher and peers' ontological provocations of the students (Matusov 2009). In short, DDEFFAA is Democratic education embedded in critical dialogue plus exposing students to diverse practices and ideas outside of their immediate environment in school, home, or local and virtual communities, including students' unique perspective, ideas and innovation, which may differ from local and wider cultures. DDEFFAA defines the major goal of education as the critical exploration of existing and transcending cultural practices including the goal of the students' own education itself. It trusts students as co-participants and co-creators of culture (von Duyke 2013) viewing students as culture makers here and now, allowing for innovation and epistemological agency as part of the critical social dialogue.

When applied to education, we, the authors, situate the notion of authorial agency as important concept that should be the target of education rather than current set in stone curricular standards. Authorial agency as applied in an educational trajectory values uniqueness, unpredictability, and caring for and interest in others while curricular standards prioritize interchangeability (i.e., one capable person can be replaced with another capable person without disrupting the activity or social relations), predictability (i.e., calculation and control of others), and structural exploitation. Agency-based participation and education bring meaningfulness, excitement, and humanity; while standards-based participation and education bring alienation, boredom, and exploitation. In our view, modern economy has been moving rapidly away from the skill- and know-how knowledge-based economy towards an agency-based economy. We are not just in the post-industrial era but we are moving to the post-knowledge era as well, which is both a painful and hopeful process of transition. In a post-knowledge society, the value becomes not on knowing something that other people know or can know but on producing a unique design and authorship. We can be naively wrong, but we think that modern educational policies aiming at standardization, like "No Child Left Behind" and "Race to the Top" in the USA are the last (but extremely painful!) kicks of the dying horse of the standards-based economy. Of course, it is not only economy that has to transition from the standards-based participation to the agency-based participation, but the entire society with its vast network of related practices and this will have



important implications for education. We may be at the beginning of an agency revolution that might break itself from neo-liberal and market-like alterations of agency to divergent and unpredictable ones.

References

Archer, M. S. (2000). Being human: The problem of agency. Cambridge: Cambridge University Press.

Argyris, C., & Schön, D. A. (1978). Organizational learning: A theory of action perspective. Reading: Addison-Wesley Pub. Co.

Aristotle. (2000). Nicomachean ethics (R. Crisp, Trans.). Cambridge: Cambridge University Press.

Aronsson, A. S. (2015). Career women in contemporary Japan: Pursuing identities, fashioning lives. London: Routledge, Taylor & Francis Group.

Baker, G., & Morris, K. (2002). Descartes' dualism. London: Routledge.

Bakhtin, M. M. (1986). Speech genres and other late essays. Austin: University of Texas Press.

Bakhtin, M. M. (1991). Dialogic imagination: Four essays by M. M. Bakhtin (C. Emerson & M. Holquist, trans.). Austin: University of Texas Press.

Bakhtin, M. M. (1993). Toward a philosophy of the act (1st ed.). Austin: University of Texas Press.

Bandura, A. (1982). Self-efficacy mechanism in human agency. American Psychologist, 37(2), 122-147.

Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Englewood Cliffs: Prentice-Hall.

Becker, C., Gansel, D., & Thorwarth, P. (2011). Die Welle ("The wave" in German) [videorecording]. United States: IFC Films: MPI Home Video.

Berlin, I. (1969). Four essays on liberty. London, New York [etc.]: Oxford University P.

Bibler, V. S. (2009). The foundations of the school of the dialogue of cultures program. *Journal of Russian and East European Psychology*, 47(1), 34–60. doi:10.2753/RPO1061-0405470102.

Blacker, D. (2013). The falling rate of learning and the neoliberal endgame. Blue Ridge Summit: Zero Books. Boaler, J., & Greeno, J. G. (2000). Indenity, agency, and knowing in mathematics worlds. In J. Boaler (Ed.), Multiple perspectives on mathematics teaching and learning (pp. 171–200). Westport: Ablex Pub.

Boesch, E. E. (1993). The sound of the violin. The Quarterly Newsletter of the Laboratory of Comparative Human Cognition, 15(1), 6–16.

Buchanan, J. M. (1979). Natural and artifactual man. In J. M. Buchanan (Ed.), What should economists do? (pp. 93–112). Indianapolis: Liberty Press.

Campbell, C. (2009). Distinguishing the power of agency from agentic power: A note on weber and the "black box" of personal agency. *Sociological Theory*, 27(4), 407–418.

Carr, W. (2006). Philosophy, methodology and action research. *Journal of Philosophy of Education, 40*(4), 421–435. doi:10.1111/j.1467-9752.2006.00517.x.

Clare, S. (2009). Agency, signification, and temporality. Hypatia, 24(4), 50-62.

Collins, A., & Halverson, R. (2009). Rethinking education in the age of technology: The digital revolution and schooling in America. New York: Teachers College Press.

Dahlberg, G., & Moss, P. (2005). *Ethics and politics in early childhood education*. London: RoutledgeFalmer. Davies, B. (1998). The concept of agency: A feminist poststructuralist analysis. *Social Analysis*, 30, 42–53.

Deleuze, G., & Guattari, P. F. (1987). A thousand plateaus: Capitalism and schizophrenia (Vol. 2): U of Minnesota Press.

Dewey, J. (1956). The child and the curriculum and the school and society (Combinedth ed.). Chicago: University of Chicago Press.

Dobyns, L. (2013, July 31). 'Agency' – a noun that translates into success *Huffington Post*. Retrieved from http://www.huffingtonpost.com/lydia-dobyns/agency-a-noun-that-transl b 3683863.html

Edwards, A., & D'Arcy, C. (2004). Relational agency and disposition in sociocultural accounts of learning to teach. *Educational Review*, 56(2), 147–155. doi:10.1080/0031910410001693236.

Edwards, A., & Mackenzie, L. (2005). Steps towards participation: The social support of learning trajectories. International Journal of Lifelong Education, 24(4), 287–302.

Engeström, Y. (2006). Development, movement and agency: Breaking away into mycorrhizae activities. Building activity theory in practice: Toward the next generation, 1, 1–43.

Fendler, L. (1998). What is it impossible to think? A genealogy of the educated subject. In T. S. Popkewitz & M. Brennan (Eds.), Foucault's challenge: Discourse, knowledge, and power in education (pp. 39–63). New York: Teachers College Press.



- Fogel, A. (1993). Developing through relationships: Origins of communication, self, and culture. Chicago: University of Chicago Press.
- Foucault, M. (1984). What is enlightenment? (C. Porter, Trans.). In P. Rabinow (Ed.), The Foucault reader (pp. 32–50). New York: Pantheon Books.
- Foucault, M., Burchell, G., Gordon, C., & Miller, P. (1991). The Foucault effect: Studies in governmentality. Chicago: University of Chicago Press.
- Freud, S. (1933). New introductory lectures on psycho-analysis (W. J. H. Sprott, Trans.). London: Hogarth Press.
- Gershon, I. (2011). Neoliberal agency. Current Anthropology, 52(4), 537–555.
- Gibson, J. J. (1979). The ecological approach to visual perception. Boston: Houghton Mifflin.
- Glaser, B. G., & Strauss, A. L. (1967). The discovery of grounded theory: Strategies for qualitative research. Chicago: Aldine.
- Greenberg, D. (1991). Free at last: The Sudbury valley school. Framingham: Sudbury Valley School Press.
- Gresalfi, M., Martin, T., Hand, V., & Greeno, J. (2009). Constructing competence: An analysis of student participation in the activity systems of mathematics classrooms. *Educational Studies in Mathematics*, 70(1), 49–70.
- Griffin, P., & Cole, M. (1984). Current activity for the future: The Zo-Ped. In B. Rogoff & J. V. Wertsch (Eds.), Children's learning in the "zone of proximal development". New directions for child development (Vol. 23, pp. 45–64). San Francisco: Jossey Bass.
- Haapasaari, A., Engeström, Y., & Kerosuo, H. (2014). The emergence of learners' transformative agency in a change laboratory intervention. *Journal of Education and Work*, 27, 1–31. doi:10.1080/13639080.2014. 900168.
- Hargreaves, A. (1994). Changing teachers, changing times: Teachers' work and culture in the postmodern age. London: Cassell.
- Hayek, F. A. V. (1994). The road to serfdom. Chicago: University of Chicago Press.
- Hiebert, J. E. (1986). Conceptual and procedural knowledge: The case of mathematics. Hillsdale: Lawrence Erlbaum Associates, Inc.
- Hitlin, S., & Elder, G. H. J. (2007). Time, self, and the curiously abstract concept of agency. Sociological Theory, 25(2), 170–191.
- Johnson, W. (2003). On agency. Journal of Social History, 37(1), 113-124.
- Jones, R. (1972). The Third Wave, 1967, an account Ron Jones. Retrieved from Libcom.org website: http://libcom.org/history/the-third-wave-1967-account-ron-jones
- Kaku, M. (2011). Physics of the future: How science will shape human destiny and our daily lives by the year 2100 (1st ed.). New York: Doubleday.
- Kant, I., & Semple, J. W. (1836). The Metaphysic of ethics. Edinburgh, UK: T. Clark; etc.
- Kennedy, M. M. (2005). Inside teaching: How classroom life undermines reform. Cambridge: Harvard University Press.
- Knowles, M. S. (1986). Using learning contracts (1st ed.). San Francisco: Jossey-Bass.
- Köhler, W. (1973). The mentality of apes. London: Routledge and Kegan Paul.
- Kohn, A. (2014). The myth of the spoiled child: Challenging the conventional wisdom about children and parenting. Boston: Da Capo Lifelong.
- Krange, I. (2007). Students' conceptual practices in science education. Cultural Studies of Science Education, 2(1), 171–203.
- Lanier, J. (2010). You are not a gadget: A manifesto (1st ed.). New York: Knopf.
- Larner, W. (1995). Theorising 'difference' in Aotearoa/New Zealand. Gender, Place and Culture: A Journal of Feminist Geography, 2(2), 177–190.
- Larner, W., & Walters, W. (2004). Globalization as governmentality. Alternatives, 29(5), 495-514.
- Latour, B. (1987). Science in action: How to follow scientists and engineers through society. Cambridge: Harvard University Press.
- Latour, B. (1996a). Aramis, or, the love of technology. Cambridge: Harvard University Press.
- Latour, B. (1996b). On actor-network theory: A few clarifications plus more than a few complications. Retrieved from www.bruno-latour.fr/sites/default/files/P-67%20ACTOR-NETWORK.pdf
- LaVaque-Manty, M. (2006). Kant's children. Social Theory and Practice, 32(3), 365-388.
- Lave, J., & Wenger, E. (1991). Situated learning: Legitimate peripheral participation. Cambridge: Cambridge University Press.
- Lemke, J. L. (1995). Textual politics: Discourse and social dynamics. London: Taylor & Francis.
- Levinson, M. (1999). The demands of liberal education. Oxford: New York: Oxford University Press.
- Linger, D. T. (1994). Has culture theory lost its minds? Ethos, 22(3), 284–315.



- Llewellyn, G. (1998). The teenage liberation handbook: How to quit school and get a real life and education (Rev., 2nd ed ed.). Eugene: Lowry House.
- Lobok, A. (2012). My educational odyssey to dialogic agency-based probabilistic pedagogy. *Journal of Russian and Eastern European Psychology*, 50(6), 5–8.
- Marx, K. (1964). The eighteenth brumaire of Louis Bonaparte. New York: International Publishers.
- Matusov, E. (2009). Journey into dialogic pedagogy. Hauppauge: Nova.
- Matusov, E. (2011). Authorial teaching and learning. In E. J. White & M. Peters (Eds.), *Bakhtinian pedagogy: Opportunities and challenges for research, policy and practice in education across the globe* (pp. 21–46). New York: Peter Lang Publishers.
- Matusov, E., & Brobst, J. (2013). Radical experiment in dialogic pedagogy in higher education and its centaur failure: Chronotopic analysis. Hauppauge: Nova.
- Matusov, E., & Marjanovic-Shane, A. (2012). Diverse approaches to education: Alienated learning, closed and open participatory socialization, and critical dialogue. *Human Development*, 55(3), 159–166. doi:10.1159/ 000339594.
- Matusov, E., & von Duyke, K. (2010). Bakhtin's notion of the internally persuasive discourse in education: Internal to what? (a case of discussion of issues of foul language in teacher education). In K. Junefelt & P. Nordin (Eds.), Proceedings from the second international interdisciplinary conference on perspectives and limits of dialogism in Mikhail bakhtin Stockholm University, Sweden june 3–5, 2009 (pp. 174–199). Stockholm: Stockholm University.
- Mead, G. H. (1956). On social psychology. Chicago: University of Chicago Press.
- Mill, J. S. (1865). On liberty (People's ed.). London: Longmans, Green, and Co.
- Mitra, S. (2006). The hole in the wall: Self-organising systems in education. New Delhi: Tata-McGraw-Hill Pub. Co. Ltd.
- Morson, G. S. (2004). The process of ideological becoming. In A. F. Ball & S. W. Freedman (Eds.), Bakhtinian perspectives on language, literacy, and learning (pp. 317–331). Cambridge, New York: Cambridge University Press.
- Neill, A. S. (1960). Summerhill: A radical approach to child rearing. New York: Hart Publishing Company. Nicholas. (1954). Of learned ignorance. London: Routledge & Paul.
- Nussbaum, M. C. (2010). Not for profit: Why democracy needs the humanities. Princeton: University Press.
- Osberg, D., & Biesta, G. (2010). Complexity theory and the politics of education. Rotterdam: Sense Publishers.
- Parsons, T., & Smelser, N. J. (1956). Economy and society: A study in the integration of economic and social theory. Glencoe: Free Press.
- Pickering, A. (1995). The mangle of practice: Time, agency, and science. Chicago: University of Chicago Press
- Pink, D. H. (2005). A whole new mind: Moving from the information age to the conceptual age. New York: Riverhead Books.
- Rainio, A. P. (2008). From resistance to involvement: Examining agency and control in a playworld activity. Mind, Culture, and Activity, 15(2), 115–140.
- Rajala, A., Hilppö, J., Lipponen, L., & Kumpulainen, K. (2013). Expanding the chronotopes of schooling for the promotion of students' agency. In J. Sefton-Green & O. Erstad (Eds.), *Identity, community and learning lives in the digital age* (pp. 107–125). New York: Cambridge University Press.
- Rietmulder, J. (2009). The circle school: An introduction to integral education ideas and practices. Harrisburg: The Circle School.
- Rigby, C. S., Deci, E. L., Patrick, B. C., & Ryan, R. M. (1992). Beyond the intrinsic-extrinsic dichotomy: Self-determination in motivation and learning. *Motivation and Emotion*, 16(3), 165–185.
- Rose, N. S. (1999). *Powers of freedom: Reframing political thought*. Cambridge: Cambridge University Press. Rousseau, J. J. (1979). *Emile: Or, on education*. New York: Basic Books.
- Shapiro, S. P. (2005). Agency theory. Annual Review of Sociology, 31, 263–284.
- Sidorkin, A. M. (1999). Beyond discourse: Education, the self, and dialogue. Albany: State University of New York Press.
- Sidorkin, A. M. (2004). Relations are relational: Toward an economic anthropology of schooling. In C. W. Bingham & A. M. Sidorkin (Eds.), *No education without relation* (pp. 55–69). New York: Peter Lang. Skinner, B. F. (1976). *About behaviorism*. New York: Vintage Books.
- Smith, L. D. (1986). Behaviorism and logical positivism: A reassessment of the alliance: Stanford University Press.
- Spinoza, B. d., White, W. H., & Stirling, A. H. (1910). Ethic (4th ed.). London, New York [etc.]: H. Frowde.



- Sugarman, J., & Sokol, B. (2012). Human agency and development: An introduction and theoretical sketch. New Ideas in Psychology, 30(1), 1–14.
- Virkkunen, J. (2006). Dilemmas in building shared transformative agency. Activités revue électronique, 3(1), 43–66.
- von Duyke, K. (2013). Students' agency, autonomy, and emergent learning interests in two open democratic schools. PhD, University of Delaware.
- Vygotsky, L. S. (1978). Mind in society: The development of higher psychological processes. Cambridge: Harvard University Press.
- Wald, R. (1978). Confronting the learning contract. Alternative Higher Education, 2(3), 223-231.
- Wegerif, R. (2007). Dialogic, educational and technology: Expanding the space of learning. New York:

 Springer
- Wertsch, J. V. (1995). Sociocultural research in the copyright age. *Culture and Psychology, 1*(1), 81–102. Zhao, Y. (2009). *Catching up or leading the way: American education in the age of globalization*. Alexandria: ASCD.

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