

## Educating for Democracy 3.0: Pedagogies of Dialectical Imagination in the Arts and Sciences

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### Abstract

This article aims at sharing some thoughts about teaching teachers how to teach for a democratic future across the arts and the sciences. Though the American and German contexts are different in many ways, they are also tied together through many channels of reciprocal influence. Our differences mean that we can learn much about one another and about ourselves in the process of our sometimes puzzling interactions. Our similarities mean that we can encourage and strengthen one another on both sides of the Atlantic as we prepare students to become effective teachers in an increasingly globalized, interconnected, and algorithmic world.

### 1. Contextual Matters

Because context always matters in pedagogy, let me share with you something of my perspective on teaching for democracy 3.0. I grew up in Seattle, the beautiful port city in the Northwest of the United States. It is the land of Boeing airplanes, Microsoft computer technology, Starbucks coffee, the Space Needle, Pacific salmon, ferry boats, rock 'n' roll, and so much more.

I also grew up in the midst of the Cold War, the pervasive background anxiety of the Soviet nuclear threat, and the horrors of the Viet Nam crisis. In elementary school, we were taught that America stood for democracy,

freedom, and God. My country saw itself as the leader of the free world and functioned unofficially as the world's police service on human rights and free enterprise. My teachers taught me that American democracy was built on universal principles of human rights and that the freedoms we enjoyed were hard won through severe testing in the Revolutionary War, the Civil War, the Civil Rights Movement, and in facing down the evil Soviet empire in hot spots all over the world. We were taught by our teachers to believe in the power of principle and not in the principle of power. We always believed that American democracy would aid a worldwide movement of freedom and human rights that would eventually prevail on every continent. We were the victors in the fight against fascism, and the strength of our principles and righteous resolve would eventually prevail against dictators, totalitarians, and sociopaths of all kinds in high office. We had the economic, military, and moral strength to back this up. Education for Democracy 2.0 was what my teachers taught me in school.

Later, I came to discover that even in progressive Seattle, we were only being taught partial truths. I guess it started for me in about 1970 when I watched the nightly news and saw the body counts from Viet Nam and the embedded reporters showing scenes from the front lines. More questions about Democracy 2.0 really began to form in my childhood mind with the Watergate scandal of the Nixon administration. More and more questions came the more I learned about the history of slavery and systemic racism against African-Americans in »the land of the free and the home of the brave.« It dawned on me over time that Native American peoples had been ruthlessly displaced and killed in order for my beloved democratic nation to expand to the Pacific coast. I also saw firsthand from the women in the generation above me and in the generation around me that women were rarely treated as equals. People of Asian descent in my part of the country were treated as second class, even though they had had an important history and contemporary presence up and down the West Coast of the USA. Mistreatment of immigrants from south of the border was only something that I dimly perceived as a child.

To me, growing up in the 1960s and 1970s democracy came with the assumption that White, mostly, or at least vaguely, Protestant, straight men were in charge and that the economic and military power that they

wielded was for the common good of humanity. The »common good of humanity« meant, of course, American democracy and Western-style free market capitalism exported around the world. We were told that spreading democracy was never an entirely easy or orderly matter; sometimes mistakes were made and things could get messy like in the Middle East and in Nicaragua. Despite all of those complications, our collective American democratic imagination was confirmed when the Berlin Wall came down in 1989 and the Soviet empire ended on December 25, 1991.

I would date the end of Democracy 2.0 in my country to 9/11, 2001. Under the Bush administration, the power of principle gave way to the principle of power. With the war in Afghanistan, two wars in Iraq, and the intentional use of torture at Guantanamo and various »black sites« around the world, it became clear that the earlier vision of democracy not only had cracks in it but was actually crumbling. At the same time as my country has struggled to deal with the absence of a definable external enemy, critical historical research has continued to uncover the depths of American racism and showed that the entire powerhouse of our economy was built on the backs of Black slaves in the 18<sup>th</sup> and 19<sup>th</sup> centuries. The full picture of Native American genocide has also come increasingly into view. Shameful treatment of gay, lesbian, bisexual, transgender, and other sexual minorities has come increasingly into the light of day. Women still are not treated as equal to men and do not receive the same pay for the same job. In addition, manufacturing jobs and whole factories moved to places of cheaper labor like Mexico, Bangladesh, and, especially, China. The American middle class began to shrink even as the 1% amassed an obscene amount of wealth. Health care costs spiraled out of control and labor unions were busted. Then, the unthinkable happened.

America elected a president who broke most of the rules of democracy and who desperately tried to position himself as a fascist savior of the country. That president aimed not to rectify problems in American democracy so much as to claim the country for the resentful and uneducated White Protestant people of the struggling middle class. He claimed to be the only one who could »make America great again.« About half of us in America recognized that the democratic principles that we had taken for granted were under serious threat with that president. More than

that, we realized that Democracy 2.0 was more than disrupted; it was broken. The would-be fascist coup attempt of January 6, 2021 further shook many Americans to our core. Even as we narrowly escaped the destruction of our democracy, approximately half of us realized that democracy as we have known it was vulnerable and needed a significant overhaul. To this moment it frightens me that approximately half of my fellow citizens – particularly conservative Protestants – still support someone whose vision does not include unshakable commitment to democratic principles like checks and balances, freedom, the rule of law, and human rights.

I do not presume to be an expert on German history, so I will only say that I am continuing to try to understand what your country has gone through over the course of the past 100 years. I am an outsider and a frequent visitor who has great love for your country and its history. I will also say that I have been to both Weimar and Buchenwald and struggled to make sense of how these two German realities could exist within 10 kilometers of one another. I have watched with admiration the decision your country made to accept 1,000,000 refugees from Syria and Afghanistan, and I have watched with increasing alarm as the AfD has gained more and more support in some areas of your country. You have achieved amazing things as a democracy in the past 70 or 30 years, depending on how one calculates the current form of German democracy. Yet, your country like mine seems to have some unresolved issues that, especially under various kinds of economic and social stress, threaten to weaken or even undermine democracy as we have known it from the middle of the 20<sup>th</sup> century until quite recently.

The USA and Germany are not the only contexts in which democracy is under threat or in need of an update today. The largest democracy in the world – India – seems now to have become something of a repressive Hindu nationalist enterprise. China is run by a post-modern emperor for whom the Communist party is an enabling puppet. I am not sure that Russia ever fully transitioned into modern democracy; it clearly functions today as a dictatorship backed by a militantly conservative Russian Orthodox Church. Hungary seems to have given up on democracy except in name. Anti-democratic movements in countries like Poland, the Netherlands, and France seem also to be on the rise. On most days, it looks

like no matter where one looks democracy is having an increasingly difficult time of it. I am no prophet, but it seems to me that we are in a kind of simmering prelude to something ominous and definitely non-democratic in the world. At best, democracy around the world has to be renewed; at worst, it has to be fought for all over again.

As if the latent racist and fascist tendencies in many places around the world that have been stirring of late are not enough to make us anxious, the whole world is in the midst of the biggest disruptive change in the history of humanity: the rise of Artificial Intelligence. While the AI revolution holds massive promise for the betterment of humanity in many sectors, it also might well threaten our existence as a species. For example, in their recent book, *The Age of AI and Our Human Future*, Kissinger, Schmidt, and Huttenlocher point to the potential for international warfare executed by AI that cannot be overridden or interrupted by human beings. They write:

Beyond AI-enabled defense systems lies the most vexing category of capabilities – lethal autonomous weapons systems – generally understood to include systems that, once activated, can select and engage targets without further human intervention... and operate without substantial human involvement.<sup>1</sup>

In disturbingly plausible scenarios, unstoppable nuclear and cyber war can be launched by super-intelligent computers in a matter of minutes. The end of humanity through AI weaponization is entirely possible in a way that makes the threat of nuclear attack by the Soviets look like a kindergarten game by comparison. While we are rethinking everything as a result of the emergence of strong AI, we have to ask whether the messiness of democracy might soon be replaced by the efficiency of algorithms calibrated to achieve the greatest good for the greatest number in a kind of cyber utilitarianism or, worse, a digital totalitarianism. Who of us can tell what democracy will look like in the age of AI? I will venture to say that it probably will not be the same as Democracy 2.0.

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1 Kissinger, Henry A./Schmidt, Eric/Huttenlocher, Daniel. *The Age of AI and Our Human Future*. New York, 2022, pp. 164–165.

Democracy will have to be reinvented for the new age into which we now find ourselves. Each of our fields of study will need to foster creative, critical, and empathic thinkers in order to develop a new theory and practice of democracy for the North Atlantic world and beyond. The future of freedom, the future of unhindered research, and the future well-being of our increasingly multi-cultural societies depend on finding a new way forward. On some days, the challenge seems overwhelming. On most days, I find the work of philosopher of education John Dewey indispensable as a helpful and hopeful resource for the work that lies before us as teachers of teachers of the new generation of citizens and leaders.

## 2. Some Guiding Principles from John Dewey

John Dewey, one of the most important philosophers of education since Plato, can serve as resource for those of us who teach teachers to teach as we face the immense challenge before us of contributing to the preservation and betterment of human life with freedom and justice. Rooted in and critical of the philosophies of Kant and Hegel on the one side and British Empiricism and Darwin on the other, Dewey helps us as teachers of teachers on several fronts.

*First*, Dewey would remind us that reinventing democracy is not a new challenge. With respect to the American context, the original form of democracy established by George Washington, Thomas Jefferson, John Adams, and Benjamin Franklin had to be refashioned a decade later by James Madison, Alexander Hamilton, and others if the American experiment was to survive. A half century later in the midst of the American Civil War crisis, Abraham Lincoln realized that the country could no longer function on the basis established by the founding generation; it had to be rethought and re-founded. Likewise, the democratic vision of the next 75 years had to give way to new theory and practice in light of the Great Depression, two World Wars, and the long struggle against Communism. In the case of German democracy, it, too, has had to be adjusted and reformulated at several key points in the 20<sup>th</sup> century. Some of the key elements of the vision and principles of Weimar had to be sal-

vaged and reinterpreted in the West after the Second World War. After the Wall came down and Germany reunited, more renegotiating of democratic values and procedures had to be hammered out. Our respective histories tell us and Dewey reminds us that democratic theory and practice, like software, has to be updated and renewed periodically if it is to meet the demands of a perpetually changing reality.

One of the keys to Dewey's thought comes from Hegel, but without the heavy metaphysics. A synthesis functions until something disrupts and disequilibrates the existing system. The organism or system then works to reestablish the prior equilibrium. Under optimal conditions, harmony can be reestablished, but it is no longer and never can be, the original settlement. There is an inescapable change and reconfiguration that takes place in attempting to return things to a balance. Nothing is ever quite the same as it used to be, even if there may be significant points of continuity with the preceding synthesis. This is simply Hegelian dialectical processes of historical development.<sup>2</sup> It is also at the micro-level of the individual learner one of the most important insights about the nature of learning and the kind of teaching that promotes the assimilation of new material to existing structures.

*Second*, Dewey's understanding of the processes of change as applied to democracy at the macro-level of society or the micro-level of individual learning remains open-ended and unfinished. He argued, unlike Hegel, that we humans never attain absolute knowledge; instead, we develop only what he called »warranted assertions.«<sup>3</sup> Warranted assertions are phenomenal, constructed, revisable, and open-ended. Whether in the humanities or sciences, warranted assertions must have both an evidential and a rational basis. As a Pragmatist philosopher, Dewey criticized both the traditional British empirical approach and the German Idealistic rational approach to knowledge. He argued that the empirical approach mis-

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2 This kind of thinking left what Dewey called »an indelible imprint« on his thinking after having been immersed in Hegel's philosophy for decades before moving beyond it. Cf. Dewey, John. *From Absolutism to Experimentalism* (1930). In: *The Later Works*, 1925–1953. Carbondale, 1981–1991, Vol. 5, p. 154.

3 Dewey, John. *Logic: The Theory of Inquiry* (1938). In: *The Later Works*, 1925–1953, Vol. 12, pp. 16–17.

takenly discounts the rational and critical element in all experience. On the other hand, he reformulated Idealist rationalism so that reason and inquiry are thoroughly grounded the flux and flow of experience. The development of »warranted assertions« means that we can actually know something, but only provisionally and always with the principle of fallibility and revisability at work. Dewey maintained that our understandings, while reliable if they meet certain basic criteria, can never become ossified or rigid if they are to be life-giving and life-sustaining. Because times change, so, too, must our conclusions and even our methods. The resolution of any given problem serves as both an address to a contemporary situation and the basis for new research and reflection.

Democracy, like other elements of culture, develops and changes over time. What worked in 5<sup>th</sup> century B.C.E. Athens would not work in Republican Rome or in Revolutionary France. What worked in the Founders' period in the USA could not bear the weight of the Civil War crisis and the battle over slavery in the middle of the 19<sup>th</sup> century. What made sense in Weimar cannot carry the freight of the contemporary globalized, digitally dynamic place of Germany in the ever more complex world situation. To be sure, certain core principles should carry through from one historical synthesis of democracy to another, but each era requires creative rethinking in order to be fully adequate to the possibilities and perils of the current and emergent reality.

*Third*, the nature of knowledge from Dewey's point of view is such that there must always be testing, experimentation, and playful exploration. While analysis and disciplinary study of the results from the past are necessary conditions for contemporary thinking, they are not sufficient. At best, we learn from the past as what evolutionary anthropologist Michael Tomasello calls »the ratchet effect.«<sup>4</sup> Metaphorically speaking, we don't have to reinvent the wheel. The results of past investigations and reflective human experience passed on in the various disciplines of the arts and sciences serve as an invaluable resource for us, but those results cannot do the hard work for us of solving contemporary problems. New challenges require new approaches and new thinking. Like the Wright brothers learning how to develop human-powered flight, we have to learn everything

4 Tomasello, Michael. *The Cultural Origins of Human Cognition*. Cambridge, MA, 1999.



possible from relevant fields of study, but we have also to develop new models and to experiment with them to and what happens when we put models into practice. In other words, to some extent we always have to learn as we go. Perhaps David McCullough in his biography of the Wright brothers said it best: »It was impossible to fly without both knowledge and skill—of this Wilbur was already certain—and skill came only from experience—experience in the air.«<sup>5</sup> Some of the most important knowledge can only arise from experimental action and testing a prototype. Many crucial things can only be known from practice and not from theory. Much study is required in any field of knowledge if one is to make a contribution to it; but transfer of existing knowledge and intellectual abstractions alone cannot really change the world. Models and prototypes must be developed based on existing knowledge and prior experience combined with creative imagination. Dewey captures this whole process of critical experimentalism in his book for teaching teachers entitled *How We Think*. There he outlines the basic processes of human knowledge construction:

1. We encounter a problem.
2. We define the problem.
3. We gather as much relevant knowledge as we can and brainstorm possible solutions.
4. We narrow down the field of possible solutions.
5. We try it out in practice and observe carefully what happens.
6. When it does not solve the problem, we return to earlier steps in the process, revise, and try again.
7. We engage in such experiments, critical analysis of results, and reformulations at any of the preceding six points and try again until we reach a solution that works and is warranted by both empirical data and rational analysis.
8. Each and every resolution becomes a hypothesis and a starting point for solving new problems that will inevitably arise.<sup>6</sup>

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5 McCullough, David. *The Wright Brothers*. New York, 2015, p. 38.

6 Dewey, John. *How We Think* (1910). In: *The Middle Works, 1899–1924*. Carbondale, 1981–1991, Vol. 6, pp. 177–356.

Dewey helps us to see that this kind of iterative and critical experimentalism is necessary for the learner to construct disciplinary knowledge that is both based on the past and simultaneously equips the learner for engaging contemporary problems for which there is as yet no clear solution. Said more simply, Dewey gives us a way to think about teaching and learning when the old answers fail to solve new problems. He provides a way to navigate when we find ourselves off the map, so to speak. This is the kind of thinking necessary for us to teach the teachers in various fields of arts and sciences in order for them to be able to equip students in various fields to contribute to the formation of Democracy 3.0 now and in the decades that lie ahead.

*Fourth*, Dewey helps us to see that the construction of the theory and practice of knowledge – whether of democracy or of a particular intellectual discipline – has both passive and active dimensions. In his book *Art as Experience*, he demonstrates that encounter with art – as with any disciplinary subject matter – has a definite rhythm. The first moment is marked by passive reception of that which lies outside of the knower. The learner has to be open, and attentive, to the phenomenon under consideration. It requires attention and receptivity that, hopefully, lead to appreciation. Prior knowledge of the subject matter has to be called up, or, at least, knowledge that is adjacent to the new matter under consideration. However, that passive orientation also has to give way to active engagement of the mind. In order for something to be truly understood, the knower has to act upon the new impressions and experiences. Active connections with preexisting knowledge has to be made. More than that, there has to be active playfulness, turning the matter over in one's mind and seeing it from various angles if it is to be assimilated into one's repertoire of theory and practice. Openness has to give way to curiosity and play in order for the learner to develop warranted assertions that might work when addressing current conundrums. Building on the insights of Kant and Hegel, Dewey calls for a thoroughly constructivist approach to teaching and learning. Learners have to actively construct their own knowledge out of the disciplinary enrichment and guidance provided for them by teachers. As Alfred North Whitehead said in one of his essays on education, there is nothing worse than dead or inert knowledge repeated for

its own sake and without any connection to live human issues and problems.<sup>7</sup> Dewey fully agreed with Whitehead on the central importance of teachers and teaching that makes subject matter come alive for learners in relation to their current life situation.

*Fifth*, Dewey held that subject matter has to be related meaningfully to both the interests of the individual learner and to the community of which the knower is a part. Dewey pushed against both a radical atomistic individualism and a group-think collectivism. Instead, the right balance between the individual and the group has to be struck in pedagogy, no matter the field of study. Individual processing and collaborative engagement require due processes pertinent to each; yet, neither can be fulfilled without an integration of the other in a dynamic, differentiated unity. This has significant implications for reformulating democracy inasmuch as Democracy 3.0 needs simultaneously to uphold the radical and inviolable worth of each person and to maintain the common good over and against mere self-interest.

While certainly not exhaustive, these key aspects of Dewey's educational philosophy point us toward pedagogical strategies that we might employ to teach the teachers how to teach in ways that will develop new disciplinary knowledge as well as lay the groundwork for Democracy 3.0. Each of these contributions of Dewey is necessary for our shared pedagogical work in service to the development of Democracy 3.0. In what follows, I will use these insights from Dewey in a synthetic and constructive way to provide a sketch of what teaching teachers for Democracy 3.0 might entail for us.

### 3. Appropriating Dewey for Pedagogies of Dialectical Imagination

We are often two steps removed from society itself. We are not the students who will become tomorrow's citizens and leaders. We are often not the teachers who teach these people, though we might have been at points in

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7 Whitehead, Alfred North. *The Aims of Education and Other Essays*. New York, 1957 [1929], pp. 1–2.

the past or, in some cases, we still also teach the students directly. Mainly, we are those who teach the future teachers in our respective subject matter areas. There is an undeniable »trickle down« or pyramid scheme character to our work. The downside of this is that we can become stuck in the past and also teach things that are irrelevant to life as it is lived in its immediacy. The upside is that we can exert influence indirectly due to the fact that teachers teach according to the theories and practices that we instill in them and because teachers tend to replicate the experience of what they have themselves been taught by their teachers.

First, a bit more on the challenges related to what we do as teachers of the teachers. We have to work hard to maintain contact with the generation of students that we actually have, not the ones we used to have or the ones we would like to have. The student population and youth culture changes continually. The older we get, the more prone we are to think that the way that we did it was the best of all possible way and that »kids today« are just not as good as we were back in the day when we were going through. Maybe I am just speaking confessionally and autobiographically, but perhaps some of you can relate to my experience. We have to make a serious effort to stay in touch with the cultural trends, epistemological contours, and preoccupations of today's learners so that we can help them to become tomorrow's teachers. One of the best way to do that is to ask continually the big, foundational questions. What is the purpose of human life? How can we best live together? What makes a good life? How does my discipline or field of study contribute to the betterment of humanity and the flourishing of life on the planet? Another good way to do this is to pay attention to popular culture and to be open to contemporary forms of art and expression.

Another challenge lies, ironically, in our expertise. Studies of experts and expertise shows that people who are truly expert in their fields can often become rigid and overconfident in their thinking. Experts suffer from a disease characterized by being too sure that they know the answers and have the right theories. I mean, that is why institutions pay us a salary, right? Yet, it is our hard-won knowledge that can often cause us to become irrelevant over time, especially in a rapidly changing world situation. Dewey's experimental mentality and conception of »warranted assertions« – with

all their partiality, fallibility, and open-endedness – can help those of us who really know things to remain open to knowing more and knowing differently. I like to think that this is, in fact, possible for old dogs to learn new tricks. I once knew a retired but still active 90-year-old professor of religious education in the United States who was said by the president of his school to be »the youngest member of the faculty« in relation to the freshness of his thinking and his openness to new ideas. Let those of us who are experts in disciplinary pedagogy likewise seek always to be »the youngest members of the faculty« in terms of our openness to new ideas, theories, practices, and assumptions. Let us avoid ossification like the plague. Perhaps it is just the Reformed Protestant iconoclasm in me talking, but I say »Let us smash all the idols!« Or, if you prefer, a less Calvinist sentiment: Let us beware of being too much in love with our own ideas and the practices that have helped us to get where we are today. Dewey helps us to see that we must periodically reinvent ourselves if we are to remain vital and relevant – as he did over the course of his 92 years of life.

Now, the opportunities. We have the opportunity to teach a way of dynamic and open-ended thinking as well as transmitting the settled knowledge of the past. We can help future teachers to see the encoded experience and lessons of the past as powerful resources for the present. Dewey's Pragmatic experimentalism has implications for the way we treat the status of disciplinary knowledge and for the way we teach the teachers how they can help learners to use that knowledge in creative ways. This pedagogical stance will likely only come to fruition if we teach that we know only in part and that we need perpetually to discover ways to solve the new problems that confront us in our disciplines and in our world.

Along that same line, we can and should teach that all human knowledge – whether in the arts or in the sciences – is built upon metaphors which arise from our bodily experience with the world and structure our conceptual imagination. In their book *Metaphors We Live By*, Lakoff and Johnson make clear that all of our theories of the way things work are built up from an ordered accumulation of metaphors and systems of metaphors.<sup>8</sup> Human knowledge in every field is experienced, encoded, sym-

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8 Lakoff, George/Johnson, Mark. *Metaphors We Live By*. Chicago, 2003.

bolized, and transmitted by means of deep metaphors at work in our conceptual imagination. Metaphors function pedagogically like bridges that help us go from what we know to what we do not know. Simply teaching this fact helps to foster a sense of the partiality, fallibility, and open-endedness of all our thinking. It helps us to instill in future teachers the notion of paradigms and frameworks of knowledge while simultaneously helping us to help them avoid reification and ossification of knowledge.

We have another opportunity as those who teach the teachers in service to the development of Democracy 3.0 can teach for creativity. Dewey reminds us that all humans are creative in the sense that we actively construct, symbolize, and communicate meaning as we go about our daily lives. It is not the case that some people are born creative and others are not; to be human is to be creative. To be human is to use imagination from the given to the not-yet-real. It is to go beyond the given and to playfully imagine that »things could be otherwise.«<sup>9</sup> In our pedagogy, we can give our students who will become teachers in various fields permission to establish creative learning environments in which the themes of play, exploration, and imagination are as important as mastery, control, and precision. The problems we face today and the even bigger ones that we face tomorrow cannot be solved merely by giving the same old answers to yesterday's problems. Instead, we have to authorize and legitimate play in order to enable students to explore those problems together and develop new answers. We can also model giving formative feedback more than summative feedback. Such in-process feedback should aim to strengthen and encourage creative thinking and not to point out or to punish mistakes.

Part of the creativity that is needed going forward in learning environments involves cross-disciplinary interaction. The anchor for much of our teaching and learning will be the disciplinary silos in which we all live. Yet, the new problems and the as-yet-undiscovered solutions to those problems will more often than not now require collaborative work across disciplinary lines. Dewey's educational philosophy points us toward

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9 Greene, Maxine. *The Dialectic of Freedom* (John Dewey Lecture Series). New York, 1988, p. 3.

cross-fertilization and differentiated unity of knowledge that arises from deep engagement with two or more fields of inquiry. Such juxtapositions will stimulate new ways to see familiar things and may open up new vistas of understanding and new solutions to emergent problems. Through imaginative and metaphoric dialogue across fields, new ways to think about and do things will doubtless emerge. Encountering the »otherness« of another discipline's way of structuring the world can evoke creative imagination. There needs to be regular and pervasive dialectical interplay between the expressive sciences, the social sciences, and the natural sciences. We can no longer afford to operate solely in our own tunnels or filter bubbles if we want to equip tomorrow's teachers with the kind of pedagogical theory and practice that will help the rising generations to forge Democracy 3.0.

Perhaps our biggest opportunity lies in the fact that computers are not human beings. I doubt whether there will ever be truly »smart« machines in the sense of developing self-reflective, imaginative, and deeply collaborative intelligence. At best, machines with super-algorithms and deep learning can detect, develop, and select patterns in already given data. Perhaps machines can also – with the right algorithms in play – generate novel combinations of existing information. That may well generate incredibly important breakthroughs in record time; but it will still not be human thought. We must be careful to keep AI under our ethical control, and that can only be done by cultivating a lively sense of vision, values, and versatility in future teachers and students whom they will teach.

I believe that in the Age of AI, into which we are now moving, there will still be a place for us humans in the new world. There will always be a need for the kind of imaginative judgment and empathic vision that only humans can provide, even with respect to the content generated by our machines. Our place in the new order of things will necessarily and inevitably be marked by serendipitous spontaneity (play and creativity), imaginative empathy (care), and deep collaboration (teamwork). In the Age of AI all of our teaching of teachers should emphasize these distinctively human themes.<sup>10</sup>

10 Parts of this section are adapted from my recent editorial in *Theology Today* 80 (2), 2023, pp. 118–120.

Let me expand just a bit more on the theme of imaginative empathy in the age of AI. We can do something that AI cannot and probably will never be able to do: we can picture another person's subjective reality. We can metaphorically »walk in their shoes.« This means that we can humanize our vast and ever-increasing knowledge. We can teach teachers to teach in ways that promote compassion and care for other human beings and for all living things. Like St. Augustine, we can teach teachers to teach with and for love. This is not limited to the humanities like literature, the arts, and performance; it also includes the physical sciences. Even and especially fields like astrophysics, chemistry, and mathematics need at some level to be connected to human welfare and well-being. They need not be reduced down to human application, but they should never lose sight of what the knowledge is used for. Just because we can do something doesn't mean that we should do it. We need to help the learners of today and tomorrow to develop the kind of critical and creative thinking that will answer the bivalent question, »What is the meaning of life and what makes it worth living?« The AI people at MIT and in Silicon Valley have increasingly been asking for help on the question of human vision and values to help them sort out what to do with the astonishing capabilities of self-teaching and deep-learning machines. This can be clearly seen in the recent crisis that resulted in a widespread call for a pause on the development of AI. It is not that the AI developers cannot see the implications for the future; it is that they are not sure that the possible implications are the right ones for human flourishing and communal well-being. The best way to teach empathy and compassion is not only to teach about such things explicitly but to model them in the classroom. As Dewey pointed out in many of his more pedagogically explicit writings, learners have to experience the subject matter that we want them to learn in the learning environment if they are to actually learn it. Nowhere is this more needed than with the kind of imaginative empathy needed toward our neighbors in the pluralistic democracies at the beginning of the age of AI. Perhaps no greater responsibility lies on our shoulders as teachers of teachers than to teach them by example the central importance of imaginative empathy and human kindness. To teach with human kindness, respect for the inviolable humanity, and radical inclusion of each person



is perhaps the most effective way to promote the development of Democracy 3.0 through educational means in each of our respective disciplines.

#### 4. Concluding Thoughts

Democracy is an experiment that has to be continually monitored and revised if it is to adapt to changing circumstances; if it gets stuck and rigid, it will become brittle and definitely break. As teachers of the teachers, we are on the front lines of protecting and encouraging the liberal spirit that makes democracy possible. All of our knowledge has to be assessed and developed in relation to human realities. Democracy has to be perpetually radicalized in the direction of including all human beings and on the basis of their bodily and cultural specificity: race, class, gender, sexual orientation, physical and mental ability, etc. It is our job to set the tone for the kind of vision and values that maintain the dignity and worth of person, community, and living being in the face of growing threats to dignity, freedom, and flourishing.

The new form of democracy that we all must hammer out together will certainly have continuities with a past that stretches from ancient Athens through 19<sup>th</sup> and 20<sup>th</sup> century developments into the current century. This means, among other things, that a middle way has to be forged between despotic rule by an individual or a privileged group on the one hand and anarchic chaos in which each one does what is right in their own eyes. The new form of democracy has to guarantee freedom through the rule of rational, fair, and humane principles instead of arbitrary rule or algorithmic imposition of necessity. Somehow, the voices of the people have to be authentically and reliably registered. There also has to be a separation of powers and a dynamic system of checks and balances so that no one element gains the upper hand and undermines all other legitimate forms of authority. Democracy 3.0 will have to address head on the role played by fake news and AI generated falsehoods. Some reliable system of verification will have to be developed to separate facts from lies. Likewise, the privacy of each person and familial group will have to be safeguarded. In the age of AI this will likely extend to protections about the

shape of one's DNA and digital traces. The rule of law and not capricious self- or corporate-interest will have to apply to multinational corporations and AI networks as well as to individuals and companies.

Democracy 3.0 will likely have to find new ways for the voice of citizens to be heard through digital means. Voting and voter identity will have to be verified in high tech and non-invasive ways. The notion of citizenship will have to be reconceived as the existing principles are premised on the nation-state as the basic political entity. More deeply, the framework for basic human rights will have to be revisited and expanded to accommodate new political, economic, and technological realities. The right to cessation of life and consciousness will have to be thought through as it may soon become possible to download a person's mind into a computer network for infinite perpetuation. Some provision needs to be developed for oversight of implanted chips and self-driving machinery. Policies about cybercrime and cyber safety will have to be developed and implemented. Some determination about the basic elements needed for determining what counts as a human life should probably be established. If machines become sentient, it will then even become necessary to think through whether there are two sets of rules – one set for humans and one set for machines and robots – that apply or only one.

I do not have all the answers for what Democracy 3.0 should look like or become. I am not certain that I am even asking all of the right questions yet. I am sure, however, that we are all moving into uncharted territory. We, along with the teachers that we teach and the students that our students teach will need to work collaboratively and imaginatively in order to create a »new and improved« democratic theory and practice. I suggest to you the idea that the educational philosophy of John Dewey is more important than ever before precisely because he provides us with a way to think and act when the old answers no longer carry the force that they did 50 or 20 or even 10 years ago. In this vein, I leave you with two quotes from Dewey that speak to the challenge before us as teachers of the teachers who will teach the leaders and citizens of the new democratic order that has to be built:

The struggle for democracy has to be maintained on as many fronts as culture has aspects: political, economic, international, educational, scientific and artistic, religious.<sup>11</sup>

Democracy has to be born anew in every generation and education is its midwife.<sup>12</sup>

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- 11 Dewey, John. Freedom and Culture (1939). In: The Later Works, 1925–1953, Vol. 13, p. 186.
  - 12 Dewey, John. The Need of an Industrial Education in an Industrial Democracy (1916). In: The Middle Works, 1899–1924, Vol. 10, p. 139.

