# Universal Design for Learning: A Basis in Phaneroscopy?[[1]](#footnote-1)

Stefan Sunandan Honisch, PhD

Banting Postdoctoral Fellow  
Department of Theatre and Film, University of British Columbia

Email: shonisch@mail.ubc.ca

# Abstract

This article proposes a way to disentangle the skein of possibilities and impossibilities threaded through Universal Design for Learning (henceforth UDL), and Disability Studies, attending to their distinctive ways of engaging with, representing, and acting upon disability access, and inclusion in university education and research (Goegan et al., 2018).[[2]](#footnote-2) My discussion brings to bear a method comprising the descriptive priorities of phenomenology, or phaneroscopy, and the interpretive apparatus of semiotics, in their elaborate codification by the pragmaticist philosopher Charles Sanders Peirce (1839-1914). Within the UDL guiding principles of providing teachers and students with flexible and varied ways to work in concert towards educational ends, I find a veritable semiotic font, teeming with *signs of possibility and impossibility* that lie outside pragmaticism’s more familiar areas of study. UDL’s difficult relationship with Disability Studies amplifies their sharply dissonant perspectives on disability access constituted through the activities of teaching, and learning. I suggest that these moments of discord can be perceived as multi-voiced engagements with aspects of experience amenable to both phaneroscopic description and semiotic interpretation. For this reason, I offer phaneroscopy and semiotics as methodological building blocks that provide UDL with a sturdy philosophical basis for charting disability’s uneasy movements between the particular and the universal.

*Keywords*: phaneroscopy, semiotic, pragmaticism, Universal Design for Learning

**Universal Design for Learning: A Basis in Phaneroscopy?**

The cliché we use most often when thinking of social normalcy is “thinking outside the box” and I’m here to tell you that the disabled are always outside the box. This is where all our thinking and working occurs. (Kuusisto, 2020)

“Of course, I have something to say to you; but I have nothing to tell you.” (Peirce, *MS 598*)

# Introduction: A Skein of Disability

This paper proposes a way to disentangle the skein of possibilities and impossibilities that Universal Design for Learning (henceforth UDL) presents to disability access practices in the university (Dolmage, 2017; Kuusisto, 2019). Attending to moments of concord, and of disagreement between UDL and Disability Studies in their respective aspirations toward inclusive curricula and pedagogy, these pages bring into consideration the descriptive method of phaneroscopy, and the interpretive procedures of semiotics developed by the pragmaticist philosopher Charles Sanders Peirce (1839-1914).[[3]](#footnote-3) Peirce’s elaborate working out of semiotics, enfolding an analytical method derived from his painstaking categorization of signs, is arguably the most well-known facet of his pragmaticism. While interconnected with its phaneroscopic basis, the entirety of Peirce’s semiotics nevertheless extends beyond my present philosophical ambit. Pressing forward with my narrower aims, I bring to bear both Peircean phaneroscopy and semiotics to mark the transition points between description and interpretation. By anchoring my approach to UDL in the fundamental categories of *Firstness*, *Secondness*, and *Thirdness*, through which phaneroscopy describes experience of every conceivable variety, I hope to say something of value about their implications for the learning’s particular designs, as these take shape when universal aspirations meet reality’s disabling compulsions.

# Learning Unboxed

The UDL Guidelines, emphasizing multiplicity in education, and providing teachers and students with varied ways to interact, discover, reflect, and collaborate, teems with signs of possibility and impossibility that spill readily outside of the small boxes into which learning is too often packed.

Peirce explains that phaneroscopy attends to the “collective total of all that is in any way or in any sense present to the mind, quite regardless of whether it corresponds to any real thing or not” (CP, 1.284).[[4]](#footnote-4) Learning, as it shall be represented here, falls within the domain of semiosis, defined by Peirce as “an action, or influence, which is, or involves, a coöperation [sic] of three subjects, such as a sign, its object, and its interpretant” (CP, 3. 332, 1934). Learning, according to this conception, is not only a set of activities, but also a cognizable entity, one that lends itself to phaneroscopic description and, ultimately, to semiotic analysis. Because of its receptivity to experience apart from questions about truth and falsity, worldly presence and absence, phaneroscopy bequeaths learning an abode all its own, sheltered from the humming anxiety about whether “atomized bits” of learning can be squeezed into the boxes of *outcomes*, *objectives*, and other comforting signposts of bureaucracy.[[5]](#footnote-5) UDL’s relationship to Disability Studies is made difficult by the former domain’s titular aspirations to universality: “UDL is the process by which we attempt to ensure that the means for learning, and their results, are equally accessible to all students” (Rose & Gravel, 2010, p. 120). Even with the heavily qualified language, however, and the laudable intentions, the stated goal is, *strictu senso*, impossible. With phaneroscopy and semiotics as a connected philosophical basis, UDL can move beyond “places to start” in Disability Studies (Dolmage, 2017, p. 152) and find what I characterize as *places to continue*. Imagining disability access through interactions and practices available to phaneroscopic description, Disability Studies communities in higher education can find new ways of being together, defined not by hierarchically assigned roles such as “researcher,” “teacher,” and “staff,” legible within a narrow conception of what universities are, but rather animated by a “will to learn,” which Peirce takes to signify “a dissatisfaction with one’s present state of opinion” (CP 5.583).

# Something to Say, Nothing to Tell: Firstness, Secondness, and Thirdness

Peirce’s philosophical writings are often held to be recondite and are therefore held at a distance. I take up aspects of his thinking here as an extension of my belief that, both conceptually and practically, UDL can gain in theoretical solidity from aligning its Guidelines with Peirce’s universal categories of *Firstness*, *Secondness*, and *Thirdness*, which phaneroscopic description distills from the manifold data of experience (Atkins, 2016; Spinelli, 2005).

A core claim of UDL is that its emphasis on flexibility and on advance planning for diverse learning needs reduces the need for individual accommodations provided *ad hoc* (CAST, 2018a; Dolmage, 2017; Rose and Gravel, 2010). Although their primary methods differ, the one emphasizing description, the other interpretation, phaneroscopy and semiotic call our attention to learning as a process that takes place in and through experiential data (Spinelli, 2005): in any given moment, an element from experience might become a sign, by referring to an object (whether imagined, real, or rule-governed), thereby generating a further sign (the interpretant). As a new, cognitively elaborated sign, the interpretant begins what is theoretically an infinite sign-interpretive process. Placing phaneroscopic description at the base of the UDL Guidelines and inviting its recommended practices to be conceived as a theoretically open-ended and infinite dialogue with signs, UDL’s “universal” aspirations can avoid the pitfalls of a cartulary of choices that document only what is deemed realistically achievable, deriding as *no more than fiction,* a reaching towards the universal.Recall that, for Peirce, phaneroscopy and semiotics take imaginative constructs of all kinds as deserving of systematic inquiry (CP, 1.284). For this reason, mere happenstance likewise finds a place not merely within, but arguably at the heart of Peirce’s pragmaticism, as Sarah Cashmore (2018) rightly notes. However, where Cashmore (2018) argues that “such an approach deemphasizes universalized learning goals in favor of a stance of continual inquiry and experimentation, which comprises a pedagogy more accommodating to dynamicism” (p. 300), I incline rather more toward a different position that considers “universalized learning goals,” and the educational practices to which they give rise, as part of the skein of possibilities and impossibilities that disability access weaves. Universal Design for Learning UDL attends to the needs of teachers and learners within educational settings. Questions proper to this latter domain foreground the “what,” “how,” and “why” of learning (CAST, 2020b; Rose and Gravel 2010). The UDL recommendations for how best to achieve inclusion and access in a learning environment are understood within recent Disability Studies scholarship as a “process and mode of becoming” (Dolmage, 2017, p. 115; Brewer, Yergeau, and Selfe, 2014).

An article by Lindsay McKenzie (2019) entitled “Professors, colleges, and companies struggle to make digital learning accessible” discusses the problems inherent in a hasty embrace of digital modalities as a lasting solution to the problem of disabling educational practices. At the core of its argument is that the mere presence of advanced technology, and of multiple textual formats, does not guarantee universal accessibility (Dolmage, 2017).UDL approaches technological mediations of educational practices with a degree of circumspection, always emphasizing alignment with UDL’s three core principles. As such, these mediated forms should embrace “goals, assessments, methods, and materials support student learning through *multiple means of representation, expression/action, and engagement*” (Hall et al., 2012, p. xiii; emphasis supplied). For UDL practitioners, these principles constitute “three critical features of any teaching and learning environment” (Rose and Gravel, 2010, p. 120). The status quo of higher education, however, bears out the pessimistic view that “it is much easier to discuss disability as just another topic, than to interweave disability issues, technologies and design into the objectives and assignments throughout a course” (Miner, 2017, p. 165).

The Center for Applied Special Technology (CAST, 2020a) website acknowledges that its UDL Guidelines may already be part of the teaching and learning practices in many classrooms but cautions that “barriers to the learning goal may still be present.” Incorporating elements of the UDL Guidelines, so the claim goes, can “support the development of a shared language in the design of goals, assessments, methods, and materials that lead to accessible, meaningful, and challenging learning experiences for all” (CAST, 2018b, “About” the graphic organizer).

All of these are ambitious claims, to be sure, ones that are by no means guaranteed to survive the translation from ideal to reality. In keeping with pragmaticism’s emphasis on meaning as that which *would* be true, and consequently, *would* guide our interactions given certain necessary conditions, the pillars of UDL require certain necessary conditions *in order to* reduce barriers to learning. This is no mere semantic quibble over the difference between what *is* true and what *would be* true, but rather a call to embrace what, in Peircean tones I might characterize as “contrite fallibilism.” In fallibilism’s language, none of our beliefs about UDL, about the solidity of its principles, and about the benefits of its application can be regarded as unshakeable and beyond question.[[6]](#footnote-6)

If phaneroscopy contemplates raw experiential data, it is, for Peirce, the constant flow, and more importantly, the development and refinement of signs that render such experience interpretable. Semiotics, which Peirce equates with logic encompasses all the ways in which the raw experiential data disclosed by phaneroscopy become available to intersubjective understanding. Phaneroscopy and semiotic thus work out the relationship between meaning, and how each of us are prepared to act in and through the world, recognizing our individual and shared dispositions fashioned through our lived experience.

Phaneroscopy does not concern itself with *all* possible experience. Instead, the phaneron is limited to “those that are logically indecomposable, or indecomposable to direct inspection” (CP 1.288). UDL’s possible and impossible threads have much to work with here, in thinking about what it means to find its “places to start thinking, doing, acting, and moving” (Dolmage, 2017, p. 145).

Among the most consequential lines of thought spun out in Disability Studies scholarship is its resolute challenge to an unvoiced, distinction between ability and disability that expresses itself bureaucratically in the array of individual accommodations and curricular retrofits that continue to dominate higher education (Dolmage, 2017; Ahmed,2015). From the initial separation of ability from disability, a host of subsidiary ableist dualisms come into being. Examples include sightedness/blindness; hearing/deafness; mobility/immobility; and speaking/nonspeaking. Each of these dualisms barricade the intersubjective communication and shared understanding that phaneroscopy (phenomenological description) and semiotic (sign interpretation) embrace as a philosophical matter of course.

# UDL Outside the Box: Pragmaticism, Phaneroscopy, Semiotic

As Stephen Kuusisto (2020) observes in this article’s first epigraph, disabled bodies are always outside the proverbial box. Peircean pragmaticism, encompassing phaneroscopy and semiotic, illustrates how UDL can unbox education, bringing teaching and learning outside, as it were, into fresh air. To the extent that UDL principles likewise tend to be placed in boxes, checklists, and other ill-fitting containers (Dolmage, 2017), the multi-voiced dialogue explored in these pages, between Disability Studies, Peircean pragmaticism, and theories and practices of UDL stands to benefit likewise from fresh philosophical air.

An initial, and frequent objection to discussing UDL, one acknowledged by its leading proponents, is that its various methods might simply exemplify good teaching and successful learning. Consequently, according to this line of argument, there is no need to add yet another concept or framework to a seemingly infinite supply of educational theories and philosophies. A related version of this objection is that providing multiple ways for students and teachers to interact in educational settings is no more than common sense. Grounding UDL in phaneroscopy, and semiotic, might thus seem to accomplish nothing more than a philosophically arduous union of the superfluous with the redundant. Recent scholarship, both on semiotics in education, and UDL, however, identifies specific curricular and pedagogical difficulties that arise in its practical application to higher education. In this spirit, a spirit always fallible, I offer some provisional rejoinders to these interconnected forms of resistance against UDL.

An important rationale for the pragmaticist approach to UDL embraced in this article is that the latter’s educational identity remains hazy, and that, more fundamentally, its theoretical flaws, and practical challenges have been given short shrift: “unless serious intellectual energy is devoted to addressing the current shortcomings of the UDL construct, within the next 10 years we may be commemorating the passing of another education fad” (Edyburn, 2010, p. 40).

In their introduction to *Semiotic Theory of Learning*, Stables et al. (2018) pointedly criticize theories about experience, cognition, and behavior for subsiding into dualisms that have made analyses of learning brittle. For these commentators, semiotic approaches can be reparative (p. 1). Building on their critique, I argue that an evolutionary, process-based account of learning retrieves the access needs of disabled teachers and students from the neat and tidy boxes into which higher education has often placed them, moving disability’s multi-faceted ways of being into the open, unboxed spaces beloved of pragmaticism.

Infrequent references to pragmatism within Disability Studies scholarship offer portray this philosophical system as clinical, and business-minded, preoccupied with “what works” for the smallest cost. Tanya Titchkosky’s (2003) discussion of “pragmatism,” for example, does not discuss the varied meanings of pragmatism in philosophical discourse, and as a result, does not account for the ways in which Peirce’s work, in particular, offers an antidote to the disabling practices that Titchkosky so persuasively critiques (p. 117).

For my purposes, then, the transformative and continually unfolding relationship between UDL and Disability Studies is one that echoes throughout with notes of caution sounded by Disability Studies scholars that UDL’s rich possibilities for disability access, however carefully framed within a systematic, readily approachable set of guidelines, however frequently updated and revised to absorb new understanding, are still not impervious to the sorts of boxes that deny disabled embodiments their creative ways.

A definition of learning consistent with Peircean phaneroscopy and semiotic emphasizes its fluidity and relationality, the way in which educational practices stretch out toward an always receding horizon of meaning. What it means to learn, on this view, refuses *a priori* separation between living and learning, and attends in equal measure to *possible*, and *actual* consequences of new knowledge.

The curricular and pedagogical coordinates for locating disability access needs, often remain imperceptible because of the stubborn tendency in education to imagine and instruct a typified learner, a misdirected approach against which the guiding lines of UDL move, recognizing its lack of correspondence to education’s *who*, *what,* and *how* (Hall et al., 2012, p. 2). While UDL’s proponents are right to protest as unhelpful the paired oppositions between “smart-not smart,’ “disabled-not disabled,” and “regular-not regular” (Hall et al., 2012, p. 2) upon which normative pedagogical systems are based, Disability Studies critiques go further, reminding us of the larger historical, political, cultural, and social systems of intersecting oppressions on which these distinctions, inseparable from their dehumanizing consequences, rely for their asserted legitimacy (Dolmage, 2017; Hamraie, 2013; Titchkosky, 2011).

Situating its distinctive critical interventions within new readings of history, culture, geography, and society, Disability Studies scholarship works assiduously to secure a place for disabled embodiments within “universal human experience” (Lewiecki-Wilson & Brueggemann, 2007, p. 1). Disability itself resists a single place, primarily because disabled embodiments express complex support and access needs that refuse bureaucratic demands and their corresponding boxes. These bureaucratic boxes disregard an additional complexifying, namely that, within the university, the features which make a learning environment accessible to one learner or multiple learners might very well create accessibility barriers for another learner, for multiple other learners, and for the teacher. UDL and Disability Studies call attention in different ways to the fictions of normativity embedded within standard, and standardized curricular designs and pedagogical methods. Whereas the imagined endpoint of access in UDL is universal access, however, Disability Studies identifies access needs as an unanswered series of question, thereby emphasizing disability’s shifting possibilities and impossibilities, its navigation of the complex, the conflictual, and the ambiguous.

To reduce the access barriers that Peirce’s philosophical virtuosity often creates, I stay within the realm of general rather than comprehensive definition. Without taking apart pragmaticism’s ontological and epistemological complex inner circuits, my focus will be on how phaneroscopy, and semiotics impart experiential contact points for the UDL’s Guidelines. As I demonstrate, Peirce’s phaneroscopic categories allow us to mark UDL’s starting points of teaching and learning (Dolmage, 2015 & 2017), while his semiotics leads us forward by offering many *places to continue*. It is worth noting here that Peirce’s pragmaticism presupposes ultimate agreement on a given dispute over meaning, an end-point regarded as not only possible but desirable and necessary. In this respect, his philosophical ambitions align with the curricular and pedagogical ones of UDL which likewise presuppose that ultimate agreement as to the benefits of universal access is to be sought (Story et al., 1998). My own interest goes in a different direction, asking about the *signs of (im)possibility* that encourage us to think of limits, edges, borders, and barriers as both starting points of inquiry, and, crucially, as *places to continue*, in virtue of their amenability to phaneroscopic description and semiotic interpretation.

Among the arguments often advanced in favor of UDL is that its principles and practices go beyond providing access only for disabled learners, instead benefitting *all* learners. The rejoinder is that to proceed in this fashion, and to cling to this desired outcome is to risk erasing the complex, shifting, and unpredictable access needs of disabled learners, and disabled educators in the university. This is of particular concern given UDL’s valuable presence as an alternative to the accommodations-based models that continue to hold sway within higher education (Dolmage, 2017). Considered from a Disability Studies perspective, UDL charts a promising course in centering the social model of disability and helps to bring access barriers to ever widening circles of public awareness. A recurring problem in the literature on UDL, however, is the dilutive phrase “regardless of disability or learning preference,” (Webb & Hoover, 2015). Variations on this rhetorical “regardless” laud UDL for a flexibility that includes accessible educational materials within its purview. Again, however, this rhetoric and its variations ultimately fail to redirect the oppressive educational habits that marginalize disabled learners and teachers in the first place. As a result, the discursive representation of UDL reduces disabled embodiment to a collection of symptoms that disrupt education as usual.

# The (Im)Possible Universality of the Universal

As suggested earlier, UDL’s aspiration toward universality is in a strict sense, impossible. Located as the subject matter for combined phaneroscopic and semiotic inquiry, however, the “universal” in UDL becomes both an indefinable *something* within all that presents itself to the initially undifferentiated experience of learning, and, through its refraction within our interpretive sensibilities, a sign, *simultaneously*, of possibility and impossibility. The implicit bivalency of “universal” can easily solidify into the sorts of dualism—universality is not *either* possible *or* impossibility—upon which pragmaticism casts its disapproving glances. Fortunately, UDL defines its wide embrace in ways that the pragmaticist apparatus permits, taking “universal” to mean not: “‘one size-fits-all’” but, instead, “that all learners with all their individual differences have equal and fair access and opportunity to learn the same content in ways that work best for them” (Hall et al., 2012, p. 4). The points of contact between UDL and pragmaticism (comprising phaneroscopy and semiotics) become clearer still when we consider that the latter does not concern itself solely with language and its various accoutrements: ideas, conceptions, and notions, all of which constitute verbal communication in its familiar forms. Instead, Peirce’s semiotics has larger designs, allowing us to understand how signs reach us from within and across a range of experiential domains that may, at times, defy and frustrate language, and to work out the *possible* effects that these signs have on our interactions in the world (W 3.260). Peirce clarifies that linguistic representations attached to words are connected to other realms of experience, allowing a creative dimension to unfold: “a meaning is the association of a word with images, its dream exciting power” (CP 4.56).

Peirce’s placing of a “will to learn,” at the center of education (Nöth, 2018), recognizes that signs actively instill, transmit, and refine knowledge. Because “signs have the power to move agents and to change their habits” those whose practices involve teaching and learning constitute teaching and, retaining Peirce’s emphasis, learning as a “semiotic process” (Strand, 2013, p. 799).

As Justin Freedman et al. (2019) have noted, “learning about UDL without a theoretical backing could lead teacher candidates to view UDL as just another set of strategies” (n.p). To avoid such misunderstanding of the latter’s avowed purpose, Peirce's pragmaticism, identified here as an interlocking system comprising phaneroscopy and semiotics, would allow teachers and students to ask the kinds of questions about education that cut across familiar and hierarchical divisions of labor between teaching and learning. Proceeding in this way, such hierarchies would dissolve, allowing a learning environment to instead re-emerge as a unified community of like-minded inquirers motivated by a common cause, rather than separated by differentiation of roles. Here I quote Peirce, noting that, although the original context of his statement is an elaboration of philosophy’s communal goal of developing and refining a “conception of reality,” his understanding of communities is nonetheless pertinent. For Peirce, a community, broadly understood, is “without definite limits, and capable of a definite increase of knowledge” (Peirce, 1868, p. 155).

Feeling (*Firstness*), reaction (*Secondness*), and thinking (*Thirdness*) are useful ways of associating Peirce’s phaneroscopic categories with both hypothetical and actual interactions in a UDL community, in which the signs “ability” and “disability” are philosophically grounded, while being allowed their needed room to move in varied, deeply creative ways: outside boxes. Their educational possibilities and limits unencumbered by bureaucratic demands for expert validation, signs of *ability* and *disability,* their infinite revelations of what is possible and what is, at the moment, impossible, allow new ways of feeling, reacting, and thinking within an open community of learners who contribute and participate as embodied agents and subjects of meaning (Rogers & Swadener, 2001).

# Universal Design for Learning as Firstness: Multiple Means of Representation

As the literature on UDL emphasizes, a crucial aspect of inclusion identifies *multiple means of representation* as a pedagogical concern tuned to how different learners perceive and comprehend learning materials (CAST, 2020b). As with the philosophical system of pragmaticism, comprehensive discussion of the various definitions, concerns, and approaches connected to UDL is beyond this article’s reach. My aim is rather to muse about the consequences for our philosophical orientation and educational practices that the UDL framework, in general, and, in particular, its Guidelines, hold for Disability Studies.

Incorporating Peirce’s phaneroscopy and semiotic as UDL building blocks advances this critical effort by pointing to the medium of representation prior to course planning, design, and delivery. Peirce’s derived category of *Firstness* accounts for “the mode of being of that which is such as it is, positively and without reference to anything else” (CP. 8.328). *Firstness* is often positioned at the greatest distance from learning, understood as marginal to the experiences that emerge in the phaneroscopic categories of *Secondness* and *Thirdness*: “Firstness is not a domain in which learning can take place since in pure Firstness, phenomena present themselves to our senses in their suchness, unrelated to anything else” (Nöth, 2018, p. 91). Moving away from this dismissive representation of *Firstness*, I would say (not tell, or argue) that it is precisely through our attention to the “suchness” of specific educational phenomena that learning begins. At this stage, undifferentiated experience of the world invites us, quietly, without insistence, to become dissatisfied with our present state of knowledge, thereby allowing for the stretching out and exercise of our sensibilities and capacities that Peirce characterizes as the “will to learn.” What might be gained by attending, for example, to the textural qualities of a course syllabus in printed form, or to the architectural “feel” engendered in the physical space of a learning environment, and more recently, to the sensorial layers, the unfamiliar blending of physical and digitized textures in online learning environments? These aspects of *Firstness* may allow a community of learners to discover modes of creativity unencumbered by the curricular and pedagogical rules, dicta, and bureaucratic pressures that squeeze the meaning out of education, reducing course syllabi to something like a business contract, merely the means to properly (and narrowly conceived) educational ends.

In claiming the educational richness of Firstness, I am happy to concede that “pure Firstness is an abstraction and cannot actually be taught” (Nöth, 2018, p. 89). Yet both from the perspective of Peircean pragmaticism, and from a Disability Studies perspective, an outright rejection of genuine Firstness does not delight in its seeming autonomy from the “real world” and, consequently, its steady defiance of standardized education. In Peircean terms, dismissing qualities of feeling (Firstness) because of their lack of pedagogical application may be said to “block the way of inquiry” (CP 1.135, 1898)[[7]](#footnote-7) by emphasizing a “will to teach” reliant on a widely accepted, but questionable division between instruction and learning, one that misrepresents the latter as mere knowledge-acquisition. Charting a different course, let us and consider the ways UDL could develop, indeed *has* developed over time as a “semiotic process,” to return to Strand’s (2013) formulation (p. 799). Firstness, the domain of qualitative possibility, and likeness (*multiple means of representation*) promises richly educative possibilities, bringing our pragmaticist community of learners into affective encounters with experiential phenomena as autonomous ways of being. Within a UDL environment, such phenomena may be mediated, extended, and enriched through verbal and textual descriptions, in accordance with the needs of those present in that specific setting. This does not preclude, however, a collective attention to each of these phenomena as potentially educative phenomena “without reference to anything else” (CP. 8.328), that is, by virtue of their inherent qualities. Consequently, a situated community of learners may come away with renewed appreciation for the learning that takes places through “meditation, musement, daydreaming, imagination and creativity” and, significantly, through “learning from error” (Nöth, 2018, p. 88).

# Universal Design for Learning as Secondness: Multiple Means of Engagement

Let us return to the educational importance of what Peirce characterizes as “The Will to Learn.” What this means for Peirce, as discussed earlier, is adopting an open posture to the acquisition of new knowledge through the educative force of Secondness (Nöth, 2018).

Pragmaticism depends on a willingness to discard prior belief, and to shed old habits of thinking, but only with ample and good reason for so doing. In a letter to philosopher Victoria Welby (1837–1912), with whom Peirce maintained a lively and sustained correspondence, he describes Secondness as “the mode of being of that which is such as it is, with respect to a second but regardless of any third” (Peirce, personal communication, October 12, 1904). This definition can be aligned with UDL’s commitment to *multiple means of engagement*. For learning to unfold, interpersonal and group interactions in a community of learners ought to include an array of different methods and techniques to sustain the collective will to learn.

Earlier, we considered the singular aspect of *Firstness* as the ways in which sign-vehicles exist as autonomous semiotic possibilities, that is, as signs of *possible* experience. The encounter between sign-vehicle and object, or more accurately, the relationship between these two instantiates *Secondness* as a phaneroscopic category within which specific types of signs emerge. The physical experience of being in a learning environment constitutes *Secondness*, when, for example, the pragmaticist community of learners comes to realize that the space presents accessibility barriers not previously perceived, identified, or known. Peirce’s semiotics offers a taxonomy of the possible relationships between a sign-vehicle and its object based on the modes of reaction thereby embodied: these, in turn, incorporate the phaneroscopic categories. To continue with the example of corporeal experiences in a learning environment, for example, the degree to which the environment’s layout resembles an intersubjective idea about what a classroom or lecture hall ought to look like, or a diagram that marks the location of accessible washrooms, ramps, and elevators (*Firstness*); through surprise: for example, the sudden realization of previously unknown accessibility barriers which prompt further inquiry (*Secondness*); and through publicly available definitions (*Thirdnes*s): individual words exemplify the symbolic meaning of *Thirdness* when rendered, for example, in spoken and written communication systems such as this article, in Braille, and in sign languages. In a learning environment, the simultaneous presence of these different communicative systems represents a multi-level structure of symbolic (intersubjective, conventional, and public) meanings, thereby offering multiple points of entry into UDL’s avowed commitment to *multiple means of engagement,* extending the consequences of this priority (our preparedness to act) beyond learner motivation, to encompass disabling barriers that can discourage such motivation (CAST, 2018).

This expanded range of *multiple means of engagement*, helps teachers and learners to become aware, through *Secondness*, of how accessibility and inaccessibility are not merely circumscribed by physical barriers to education, but may also bring into play the experiential realms of the phaneroscopic, through new understandings of the relationship between disability access, teaching practices, and engaged learning (Nöth, 2018). In this way, the richness, depth, and variety of *Secondness* as a phaneroscopic category can help us find a *place to continue* in providing “all individuals equal opportunities to learn” (CAST, 2018a).

# Universal Design for Learning as Thirdness: Multiple Means of Action and Expression

From the initial experience of surprise, even of dismay that *Secondness* may bring (Cooke, 2011), there takes root generative possibilities for growth, continuity, and for a swifter advance toward the relational ends of education. The phaneroscopic category of *Thirdness* unites teaching and learning beneath the banner of “the will to learn.” (CP, 1.135). Taken together, UDL’s Guidelines suggest an intriguing alignment with the future-directed concerns of Peircean semiotics, reaching, in the case of UDL, toward “universality,” and in the case of semiotics, toward ultimate agreement by an open, limitless community. What we might therefore identify as *semiotic futurity* beckons from the realm of *Thirdness*, drawing out the educative possibilities of experiences that evolve, shift, and deepen along the path from the phaneroscopic to the semiotic, or, in more familiar words, “the passage from sensation to thought” (Short, 2010, p. 534).

Latter-day exponents of Peircean pragmaticism have advanced the strong claim that “you cannot avoid basing your learning theory on *some* theory of signs’” (Houser, 1987, p. 271). Crucially for present purposes, *Thirdness* highlights the reciprocal nature of learning, and dissolves the conventional separation of teaching and learning through the unified powers of the phaneroscopic and the semiotic. Going further, we learn through signs: signs become richer and more meaningful owing to our concerted interpretive work within a community of willful learners: “the signs are not only our educators, but the sign users also educate the signs insofar as they begin to use signs in a different sense because of which the signs, in turn, acquire new meanings” (Nöth, 2018, p. 64; Nöth 2014).

As with the sign-vehicle, and sign-object relationship, Peirce classifies the different ways in which signs generate meanings by bringing out certain features of the object, features which themselves become signs. Peirce’s specialized term for this semiotic process, and, notably, for the sign produced through the interaction of the sign-vehicle and object is “*interpretant*.” Through their relative degrees of *Firstness*, *Secondness*, and *Thirdness*, these interpretants, or signifying effects may unfold as qualitative possibilities (*rhemes*), as individual assertions or statements about what is the case, or a single example of something (*dicisigns*), or as “*a general principle* that can be applied universally” (*arguments*) (Plowright, 2016, p.70; emphasis supplied).

Here I offer several concrete examples of how attending closely to qualitative aspects, physical objects, and familiar features of our learning environments can incorporate this Peircean understanding of how signs relate to their interpretants, not necessarily of new knowledge, but, perhaps more modestly, of fresh perspectives on what we have come to take as the given in our universities. Rather than picking out Peirce’s own examples of different sign-types, I offer ones that might serve as an approximate guide to how UDL, informed by phaneroscopy and semiotic, might proceed. Here, I resituate them to illustrate my own interest in how a phaneroscopy of UDL might evolve into a semiotic process that pinpoint and map *signs of (im)possibility* in disability access. In this way of approaching UDL, *rhemes* might include the visual, and tactile qualities of a course syllabus that incorporates (or fails to adhere to) UDL principles. Because such a syllabus is a *possible* object, it constitutes a *rheme*. Specific instances of UDL practiced within a community of learners are embodied as *dicisigns*: for example, an excerpt from a video recording prefaced by verbal description and accompanied by closed captioning. Pursuing our conception where it may lead, of UDL as involving signs and sign-interpretation we reach the third level, that of generalizations expressed in *arguments*. Consider, for example, the UDL principles discussed in this paper. Both the UDL Guidelines themselves (*arguments*), and my own interpretation of their phaneroscopic and semiotic potential (a fluid and dynamic mix of *rhemes* and *dicisigns*) might provide the focus of a class discussion in which students can participate either verbally, or, depending on their access needs, write their thoughts out on paper, or on an electronic device, for a peer volunteer or the instructor to share with the class (Dolmage, 2017). As these examples indicate, this combined phaneroscopic and semiotic approach to UDL enables us to “learn by studying the objects of knowledge by direct experience of them, or from meanings attributed to them in sentences, texts or books, which are verbal interpretants of these objects” (Nöth, 2018, p. 64).

Peircean pragmaticism rests on the promise of future agreement on the meaning of signs within a community of inquiry. At present, however, there is strong disagreement within higher education communities about UDL’s benefits, pitfalls, and discursive habits. Often, too, there are clashing perspectives over terminology (Goegan et al., 2018). UDL’s rhetorical emphasis on “multiple means” to systematically address the various parts of educational interactions is difficult to frame in concrete language. Peirce’s architectonic philosophy of pragmatism is helpful in this regard, because his phaneroscopy, with its categories of *Firstness*, *Secondness*, and *Thirdness*, recognizes vagueness as an irreducible experience itself, one that forms the bedrock of all subsequent experience and inquiry. By finding common cause as part of a community of learners, teachers and students can derive benefit from asking the kinds of questions about educational interactions and processes that sign interpreters ask about interactive and processual elements picked out from the phaneron.

The scholarly literature in Disability Studies makes powerful arguments against treating accessibility, like disability itself, as a problem with individual bodies, minds, and places rather than as an intersubjective, relational experience. The advocacy for phaneroscopy and semiotic advanced in this article as a pragmaticist basis for UDL recognizes that signs function as conduits for meaning. Pursuing this unblocked way of inquiry, questions of meaning are inseparable from how we represent, engage, act, and express what and how we learn, and perhaps more importantly still, *from whom* and *with whom* we learn. In these pages, I have tried to retain both a clear sense of the problems that arise in the rush to embrace “universality” while retaining some belief in the potential benefits of highlighting sensory, cognitive, and physical experiences that locate the body as a “sentient medium of learning” (Smith, 2007, p. 48; Ceraso, 2014).

**Conclusion: Belief in Universal Design for Learning as a “Demi-cadence”[[8]](#footnote-8)**

The argumentative strands of this article apply to Disability Studies approached from humanistic perspectives, but also lend themselves to wider application in the social sciences. Disability access continues to challenge universities that typically rely largely on standardized (bureaucratically approved) demonstrations of inclusion through individual accommodations (Goegan et al., 2018). Embracing the pragmaticist foundation laid in the foregoing pages, highlights how requiring disabled learners to self-identify, and to follow established institutional procedures for *ad hoc* accommodation of their learning needs are deeply problematic, and raise to the surface “philosophical and psychological questions underlying curriculum design that should exercise the most penetrating and the most synthesizing minds” (Houser, 1987, p. 252).

To return to my primary motif, the “universal” in Universal Design for Learning is a *sign of (im)possibility*. As a sign, *the (im)possible* interacts with the teachers and learners who themselves becomes signs within the unfolding semiotic processes of UDL, navigating the experiential worlds of *Firstness*, *Secondness*, and *Thirdness*. Enmeshed in a process of reciprocal education, what Tanya Titchkosky (2011 identifies as “the question of access” discloses the learning opportunities created when the signs *teacher* and *learner* encounter the sign *accessibility*, and when the interaction of these signs dispels conceptually tidy notions of what it means for education to be inclusive of disabled embodiments.

Central to Peirce’s semiotic, and foundationally, to his phaneroscopy, is a community of inquirers for whom signs produce publicly available—or to voice the same thought in a philosophical register, intersubjective—meanings. Within such a community, disabled learners enter a phaneroscopic and semiotic realm as insightful, valued, and integral members, rather than being merely parenthesized, bureaucratically, and mechanically waved aside as inconvenient afterthoughts. This learning community itself becomes, by turns, a sign of the *possible* (*Firstness*), the *actual* (*Secondness*), and of the *universal* (*Thirdness*).

As a disabled member of communities of learning that continually sound the interdisciplinary depths, my own ways of thinking, writing, and working exist in that unboxed world described so resonantly by Stephen Kuusisto (2020). a world of *(im)possibilities* that have nothing to tell, and something at once particular and universal to say.

# References

Ahmed, Sara. (December 15, 2015). “Melancholic Universalism.” *Feministkilljoys.com*.

Atkins, R. (2016). Direct inspection and phaneroscopic analysis. *Transactions of the Charles S. Peirce Society 52* (1), 1-20. DOI:10.2979/trancharpeirsoc.52.1.01

Atkins, R. (2013). Broadening Peirce's phaneroscopy: Part two. *The Pluralist 8* (1), 97-114. DOI:10.5406/pluralist.8.1.0097

Brewer, E., Yergeau, M. & Selfe, C.L. (2014). “Creating a culture of access in composition studies.” *Composition Studies 42* (2). Buchler, J. (1940/2014). *The philosophy of Peirce: Selected writings.* Routledge.

Cashmore, S. (2018). “In search of a pedagogy of change through the developmental teleology of Charles Sanders Peirce.” *Transactions of the Charles S. Peirce Society: A Quarterly Journal in American Philosophy 54* (3), 295-319. https://www.muse.jhu.edu/article/713766.CAST (2018a). The UDL Guidelines. *Universal Design for Learning Guidelines version 2.2*. Retrieved from <http://udlguidelines.cast.org\CAST>

CAST (2018b). The UDL Guidelines. *About the Graphic Organizer.* <http://udlguidelines.cast.org/more/about-graphic-organizer>

CAST (2020a). About CAST. *Until Learning Has No Limits*. <http://www.cast.org/>

CAST (2020b). About Universal Design for Learning*. UDL Guidelines What, Why How). http://www.cast.org/impact/universal-design-for-learning-udl*

Ceraso, S. (2014). (Re)educating the senses: Multimodal listening, bodily learning, and the composition of sonic experiences. *College English 77*(2), 102-123.

Cooke, E. F. (2011). Phenomenology of error and surprise: Peirce, Davidson, and McDowell. *Transactions of the Charles S. Peirce Society: A Quarterly Journal in American Philosophy 47*(1), 62-86. <doi:10.2979/trancharpeirsoc.47.1.62>

[CP]. Peirce, C. S., Hartshorne, C., Weiss, P., & Burks, A. W. (Eds.). (1931–58). *Collected papers*. (8 vols.). Belknap Press of Harvard University Press.

Dolmage, J. T. (2017). *Academic ableism: Disability in higher education.* University of Michigan Press.

Edyburn, D. L. (2010). Would you recognize universal design for learning if you saw it? Ten propositions for new directions for the second decade of UDL. *Learning Disability Quarterly, 33*(1), 33-41. [https://doi.org/10.1177/073194871003300103](https://doi.org/10.1177%2F073194871003300103)

[EP]. Peirce, C. S. (1998). *The essential Peirce: Selected philosophical writings, Volume 2 (1893-1913).* (Peirce Edition Project, Ed.). Indiana University Press.

Goegan, L. D., Radil, A. I., & Daniels, L. M. (2018). Accessibility in questionnaire research: Integrating universal design to increase the participation of individuals with learning disabilities. *Learning Disabilities: A Contemporary Journal, 16*(2), 177-190. <https://eric.ed.gov/?id=EJ1194555>

Haack, S. (2014). Do Not block the way of inquiry. *Transactions of the Charles S. Peirce Society 50* (3), 319-339. DOI:10.2979/trancharpeirsoc.50.3.319

Hall, T. E., Meyer, A., & Rose, D. (Eds.). (2012). *Universal design for learning in the classroom: Practical applications*. Guilford Press.

Hamraie, Aimi. “Designing Collective Access.” *Disability Studies Quarterly 33* (4).

Houser, N. (1987). Toward a Peircean semiotic theory of learning. *The American Journal of Semiotics 5*(2), 251–274. <https://doi.org/10.5840/ajs19875219>

Kuusisto, S. (2019, June 4). Universal Design and Utopian Insistence. *Planet of the blind.* <https://stephenkuusisto.com/2019/06/04/universal-design-and-utopian-insistence/>

Kuusisto, S. (2020, January 8). Eye rolling and disability, a brief explanation. *Planet of the Blind.* <https://stephenkuusisto.com/2020/01/08/eye-rolling-and-disability-a-brief-explanation>/

Lewiecki-Wilson, C., & Brueggemann, B. J. (2008). Introduction. In C. Lewiecki-Wilson, & B. J. Brueggemann (Eds.), *Disability and the teaching of writing: A critical sourcebook* (pp. 1-9). Bedford/St. Martin's.

Margolis, J. (2007). “Rethinking Peirce’s fallibilism.” *Transactions of the Charles S. Peirce Society, 43*(2), 229-249.

McKenzie, L. (2019, December 2). The Digital courseware accessibility problem. *Inside Higher Education*. <https://www.insidehighered.com/digital-learning/article/2019/12/02/professors-colleges-and-companies-struggle-make-digital>

Miner, R. (2017). Enhancing campus accessibility: A disability studies approach to teaching technical communication. In M. S. Jeffress (Ed.), *Pedagogy, disability and communication: Applying disability studies in the classroom* (pp. 163-183). Routledge.

Nöth, W. (2018). Education in the domain of secondness. In A. Stables; W. Nöth; A. Olteanu; S. Pesce; & E. Pikkarainen (Eds..), *Semiotic theory of learning: New perspectives in the philosophy of education* (pp. 73-86). Routledge. https://doi.org/10.4324/9781315182438

Nöth, W. (2014). Signs as educators: Peircean insights. In I. Semetsky, & A. Stables (Eds.), *Pedagogy and edusemiotics* (pp. 7–18). Sense Publishers.

Peirce, Charles S., (1868). Some consequences of four incapacities. *Journal of Speculative Philosophy,* *2*, 140-157. <http://www.peirce.org/writings/p27.html>

Peirce, C. S. [W]. (1982). *Writings of Charles S. Peirce: A chronological edition, vol. 8: 1890–1892*. (Peirce Edition Project, Ed.). Indiana University Press. <https://muse.jhu.edu/book/2865#info_wrap>

Peirce, C. S. [E.P.] (1998). *The essential Peirce: Selected philosophical writings, Volume 2 (1893-1913).* (Peirce Edition Project, Ed.). Indiana University Press.

Peirce, C. S., Hartshorne, C., Weiss, P., & Burks, A. W. (Eds.) [CP]. (1931–58). *Collected papers*. (8 vols.). Belknap Press of Harvard University Press.

Plowright, D. (2016). *Charles Sanders Peirce: Pragmatism and education*. Springer. <https://link.springer.com/book/10.1007/978-94-017-7356-0>

Rogers, L. J., & Swadener, B. B. (2001). *Semiotics and dis/ability: Interrogating categories of difference*. State University of New York Press.

Rømer, T. A. (2019). “A critique of John Hattie's theory of visible learning.” *Educational Philosophy and Theory 51* (6), 587-598. doi:10.1080/00131857.2018.1488216

Rose, D. H., & Gravel, J. W. (2010). Universal design for learning. In E. Baker, P. Peterson, & B. McGaw (Eds.). *International encyclopedia of education, 3rd Ed.* (pp. 119-124). Elsevier. <http://www.cast.org/publications/2010/universal-design-for-learning-rose-gravel>

Shook, J. R. & Margolis, J. (2006). *A companion to pragmatism*. Blackwell.

Short, T. (2010). Did Peirce have a cosmology? *Transactions of the Charles S. Peirce Society, 46* (4) 521-543. DOI:10.2979/trancharpeirsoc.2010.46.4.521

Smith, S. (2007). The first rush of movement: A phenomenological preface to movement education. *Phenomenology & Practice 1* (1), 47-75. <https://doi.org/10.29173/pandpr19805>

Spinelli, E. (2005) *The Interpreted world: An introduction to phenomenological psychology*. Sage. <https://uk.sagepub.com/en-gb/eur/the-interpreted-world/book227009>

Story, M. F., Mueller, J. L., & Mace, R. L. (1998). A brief history of universal Design. In *The universal design file: Designing for people of all ages and abilities* (Ch. 1, pp. 5–14).The Center for Universal Design, N. C. State University. <https://projects.ncsu.edu/ncsu/design/cud/pubs_p/pudfiletoc.htm>

Stjernfelt, F. (2014). *Natural propositions: The actuality of Peirce’s doctrine of dicisigns*. Docent Press.

Strand, T. (2013). Peirce’s rhetorical turn: Conceptualizing education as semiosis. *Educational Philosophy and Theory 45*(7), 789-803. <https://doi.org/10.1111/j.1469-5812.2011.00837.x>

Titchkosky, T. (2003/2006). *Disability, self, and society*. University of Toronto Press <https://doi.org/10.3138/9781442673939>

Titchkosky, T. (2011). *The question of access: Disability, space, meaning*. University of Toronto Press.

Webb, K. K., & Hoover, J. (2015). Universal design for learning (UDL) in the academic library: A methodology for mapping multiple means of representation in library tutorials. *College & Research Libraries 76* (4), 537-553. DOI:10.5860/crl.76.4.537

[W]. Peirce, C. S. (1982). *Writings of Charles S. Peirce: A chronological edition, vol. 8: 1890–1892*. (Peirce Edition Project, Ed.). Indiana University Press.

1. This article’s title points to Charles Sanders Peirce’s 1906 essay “The Basis of Pragmaticism in Phaneroscopy.” In *The Essential Peirce: Selected Philosophical Writings* (1893-1913). [↑](#footnote-ref-1)
2. The metaphor of “tangled skeins” is one that Charles Sanders Peirce uses to figure phaneroscopy’s concern with “all that in any sense appears” and to “make the ultimate analysis of all experiences the first task to which philosophy has to apply itself” (CP 1.280, 1902). [↑](#footnote-ref-2)
3. I thank the two anonymous reviewers for their helpful comments and questions in response to an earlier version of this essay. [↑](#footnote-ref-3)
4. This article follows accepted practice for referring to the writings of Charles Sanders Peirce. In-text citations of the eight-volume (at the point of writing) “Writings of Charles S. Peirce” published by Indiana University Press use the standard abbreviation “W” followed by the volume number and page number. In-text citations of the eight-volume “Collected Papers of Charles Sanders Peirce” published by Harvard University Press use the standard abbreviation “CP” followed by the volume number, and paragraph number(s). In-text citations of the two-volume “The Essential Peirce” published by the Peirce Edition Project use the standard abbreviation “EP” followed by the volume and page number(s). In-text citations of unpublished manuscripts use the standard abbreviation “MS” followed by an identifying number. R. S. Robin (1967), “Annotated Catalogue of the Papers of Charles S. Peirce” published by University of Massachusetts Press, I have followed the guide to referencing style in the works of Charles Sanders Peirce in J.R. Shook & J. Margolis (2006), *A companion to pragmatism,* p. xi. For citing unpublished manuscripts, Shook & Margolis (2006) also follow R.S. Robin (1967). [↑](#footnote-ref-4)
5. Thomas Aastrup Rømer (2019) deploys the phrase “atomized bits” in a different context, although there is a shared concern with the deleterious effects of reducing an education *process* (a word I use advisedly) to the measurable and observable (p. 590). [↑](#footnote-ref-5)
6. See Margolis (2007) for a discussion of the challenges involved in connecting Peirce’s phenomenology and fallibilism. [↑](#footnote-ref-6)
7. The appearance of the motto “Do not block the way of inquiry” in Peirce’s writings has a complex, and not entirely clear genesis, as explained by Susan Haack (2014). [↑](#footnote-ref-7)
8. Here I gesture toward Charles Sanders Peirce’ essay “How to Make Our Ideas Clear” (Buchler, pp. 28-29). It is worth quoting Peirce at length: “And what, then, is belief? It is the demi-cadence which closes a musical phrase in the symphony of our intellectual life. We have seen that it has just three properties: First, it is something that we are aware of; second, it appeases the irritation of doubt; and, third, it involves the establishment in our nature of a rule of action, or, say for short, a habit. As it appeases the irritation of doubt, which is the motive for thinking, thought relaxes, and comes to rest for a moment when belief is reached. But, since belief is a rule for action, the application of which involves further doubt and further thought, at the same time that it is a stopping-place, it is also a new starting-place for thought.” [↑](#footnote-ref-8)