

Editorial: Drawing and knowledge

Item Type	Article
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Citation	McGuirk, T. (2024). Editorial: Drawing and knowledge. Drawing: Research, Theory, Practice, 9(1), 3-18. https://doi.org/10.1386/drtp_00125_2
DOI	10.1386/drtp_00125_2
Publisher	Intellect
Journal	Drawing: Research, Theory, Practice
Download date	2026-05-10 18:11:13
Link to Item	http://hdl.handle.net/10034/628619

Drawing and knowledge: Editorial

What again shall we say of the actual acquirement of knowledge? – is the body, if invited to share in the inquiry, a hinderer or a helper?
Plato (in Jowett & Knight 1999: 601)

Thinking is not something that happens in a mind, as an attribute or quality that belongs to a subject who is isolated from the world; it is an activity or event in the world.
(Gallagher in Robbins & Aydede 2009: 39)

The significance of drawing as a means of knowing is testified to within a wide range of practice, fine art practices, as well as practices such as architectural, botanical, geological and other scientific drawing. Drawing is commonly understood as having an intellectual dimension in terms of accessing and presenting ideas in a visual mode. The articles in this special edition present an array of practice and theory in a variety of disciplines, encompassing examples of a range of approach within various fields of fine art – including reference to instillation and performance. The discipline of architecture is prominently represented (including education in that field), as is scientific/artistic collaboration and other collaborations which share a focus on the environment and environmental concerns.

What follows will initially look at the role of the body in both drawing and indeed cognition, but also at the way in which this embodied dimension is enmeshed with other aspects of cognition and indeed drawing, including, amongst others, those situated, enactive and extended dimensions. Throughout the texts presented here these dimensions of cognition and of drawing are referenced and investigated in ways that cast light on the epistemic value of the many and varied drawing practices referred to in this special edition.

Drawing and embodiment

This text will focus initially on the role of the body in drawing processes which has very often been disregarded and indeed disparaged. Particularly within the culture of higher education, but more broadly as well. Anxiety regarding the epistemic worth of the work of the hands appears endemic and drawing is unfortunately not immune to such prejudices. These anxieties relate to those situated, embodied and enactive aspects of drawing as praxis. Within strains of modernist thought in the field of art and design such attitudes are in fact sometimes amplified. However, as we shall see, a more positive appraisal of the embodied, situated and enactive aspects of drawing, and other artmaking practices, is bolstered by recent

advances in understanding at the intersection of the fields of cognitive science and philosophy of mind. This is discussed here in relation to the 4E model of cognition (Newen, De Bruin & Gallagher 2018).

Disegno

Traditional academic education in observational drawing required the student to encounter the world not from an objective, much less a phenomenological, stance. The task of drawing the figure in the life room, for example – at the centre of the curriculum well into the mid 20th century – was not that of drawing the presented subject or visual field, but rather that of interpreting it through a filter, that allowed one to draw an ideal form, an idealised image of what one aspired to see. Long immersion in an academic training provided that filter. The student of life drawing, for example, would not be at liberty to draw an actual life model before spending, often years, drawing from classical models in the form of casts of Greek, Roman or Renaissance origin. At the core of such training, we find Neoplatonism, a philosophy, at the heart of which, sits a distrust of the body. Such distrust predates Neoplatonism however and is as audible in Plato's dialogues as it is in the disputes of the first Florentine academy, the *Accademia delle Arti del Disegno* (1563).

We do well to remember that a primary motivation of the founders of the *Accademia* was the social advancement of its members. The disputes that accompanied the founding of the first academies of fine arts tell us much about the founders' motivations and desire for enhanced status. The naming and the dedication of the Florentine academy to *disegno* (drawing) was not extraneous to that ambition. It has been recognised that “there was an aura of learning, ... philosophical endeavor and gentlemanly pursuit connected with the name” (Wittkower & Wittkower as cited in Jack 1976: 7). Bourdieu (2000) identifies such nomenclature as of great significance, describing it as the “autonomization of the artistic field” (2000: 20-21). Drawing in the guise of theories of *disegno* may then be understood as a conduit for the necessary re-evaluation.

In the concept of *disegno* the artists of the academy elevated drawing to an overarching principle. They emphasised the intellectual and conceptual dimensions of drawing in order to associate the academy and its members with the liberal arts and to disassociate it and them from the waning culture of the guild and the workshop, and the taint of manual labour. The repudiation of these associations was indeed one of the institutions main purposes.

Birmingham, (2000) characterises the “problematic” status of the arts in this period, “stigmatised as handicrafts and institutionalised within the medieval guild system, they appeared as skills better suited to the artisan than to the courtier” (2000: 4).

Bourdieu (2000) analyses this phenomenon with regard to a more universal disparagement of “productive labour” by comparison with “symbolic labour” (2000: 20-21). He explains that: “painterly activity progressively asserted itself as a specific activity, irreducible to a simple labour of material production, ... consequently claiming the status accorded to the noblest intellectual activities” (2000: 20).

Through various theories of *disegno* the early academicians sought to ensconce drawing firmly within the theoretical domain. Paradoxically, while privileging the practice of drawing as a paragon, this strategy distanced it from its obvious and vital embodied, situated and enactive aspects.

Neoplatonism

Within Neoplatonic theories of *disegno* as proposed by artists and theorists such as Giorgio Vasari (1511 – 1574) and later Federico Zuccaro (1539 – 1609) we can detect a deep-seated apprehension regarding the manual aspects of drawing. The artist and theorist Vasari (one of the Florentine Academy’s founders) defined *disegno* as follows: “*Disegno* is an apparent expression and declaration of the concept (*concetto*) held in the mind and of that which, to say the same thing, has been imagined in the intellect and fabricated in the idea” (Vasari as cited in Quiviger 2002: 54). This conception references the Platonic ‘Forms’, Christianised as ‘ideas’ within “the Devine Intellect” (Langmuir & Lynton 2000: 200).

Vasari recognised both the intellectual and embodied aspects of *disegno*, seeing them as not entirely separate, his tendency to integrate them can be seen as progressive, in the light of understandings that shall be addressed later. For Zuccaro however, *disegno interno* and *disegno esterno* are separate and independent intelligences. *Disegno interno*, in this view, accesses the noumenal realm of inner form and it pertains to the universal and universal concepts, whereas *disegno esterno*, represents the embodied, situated and enactive practice of drawing with access merely to the phenomenal world and therefore, by comparison with *disegno interno*, was 'secondary and necessarily inferior' (Goldstein 1996: 31-32). *Disegno esterno* also pertains to the particular as opposed to the universal and is thereby tainted by

association with memesis, placing it at a further remove from the ideal world and from ultimate truth (Goldstein, 1996: 32).

David Rosand captures the essential complexities of such Neoplatonic conceptions of *disegno*; citing issues that are still relevant today:

For all the philosophical rhetoric brought to the discussion by intellectually ambitious academics like Zuccaro [...] a basic truth remains; *disegno* is fraught with contradiction and ambivalence, located as it is at the very boundary between mind, hand, idea and form. (2002: 60)

Tanehisa Otabe (2009) tells us that according to the-Neoplatonic principles on which such theories rest, the ideal “inner Form” conceived in the mind of the artist is closest to truth. In the guise of practice however, as *disegno externo*, drawing is excluded from that status. In the flawed human hands of the artist struggling to manipulate obstinate matter, the ideal inner Form is inevitably adulterated, becoming sullied outer Form or as Otabe terms it “Form in the bodily”. As he explains, “[o]nce the inner Form of an artist ... is instantiated in a body,” (p. 58) the purity of the original conception is lost. He further explains: “[t]he relation between these Forms corresponds to that between theory and practice, or that between spirit and body. Preferring theory to practice and spirit to body characterizes the theory of the Renaissance” (2019: 58).

Raphael without hands

Otabe (2009: 58) instances a graphic example of this Neoplatonic view in reference to a play by Gotthold Ephraim Lessing (1729-81) entitled *Emilia Galoni* (1772). In the play the idea of “Raphael without hands” is discussed, that is, the radical notion that if only the embodied and embedded dimensions of artmaking might be dispensable, then the artwork could be realised in a purified form. Bloemacher (2011: 79) suggests that this concept is older and originates with Raphael himself. Otabe relates that the artist Conti, a character in the play, discusses the idea of the artist’s wish to impose their pure inner “conception” in face of the challenges of their imperfect dexterity and obdurate materials. Conti considers the matter:

Ha! What a pity that we do not paint directly with our eyes! How much is lost on the long path from the eye, through the arm, into the brush! ... Or do you think. ... that Raphael would not have been the greatest artistic genius had he unfortunately been born without hands? (2009: 58)

At play here is the notion that an ideal somehow disembodied artist might succeed better in projecting their idea, as ideal inner Form, that, “spiritual conception in the mind” onto their medium, if unencumbered by their body, environmental restraint or the contingencies of their materials.

Otabe apparently employs this idea merely as a point against which to pit his counterargument. He posits that although it may *seem* that the artist has “a clear form in their minds before practicing” (2009: 60), thereby giving the impression that they realise their conceptions “at a stroke ... as if the physical or corporal practice were a loyal servant of the inner conception” (2009: 61). This impression is however, according to Otabe, mere appearance, and the opposite is in fact the case. The truth is that artists can “conceive only what their body can carry out.” Inner Form, Otabe argues, “simply results from repeating physical practices, a conception sedimented in the body as a physical technique or routine habitus” (2009: 61). The Neoplatonic vision cannot withstand scrutiny Otabe asserts, because it is only when the artist has established their technique that they:

... can bring forth a work of art at a stroke, ... This Form, ... does not exist as a spiritual conception in the mind, but in the physical body that has appropriated a technique as a kind of physical habitus. (Otabe 2009: 61)

Otabe’s refutation forefronts the role of “habitus” and as such chimes with much of recent research in the areas of situated and enactive cognition, research that has roots in American Pragmatist philosophy and Phenomenology, founded in the work of Dewey, Heidegger and Merleau-Ponty, amongst others.

Merleau-Ponty, with customary insight regarding the pre-eminence of the body, provides perhaps the strongest direct counterweight to the idea in the artist’s vision might somehow ideally be projected onto obstinate matter without that inconvenient conduit, the artist’s imperfect body.

“... we cannot imagine how a mind could paint. It is by lending his body to the world that the artist changes the world into paintings. To understand these transubstantiations we must go back to the working, actual body ... that body which is an intertwining of vision and movement. (Merleau-Ponty, in Rosand 2002: 221)”.

Otabe's (2009) references to technique and to habitus are, he acknowledges, indebted to Heidegger, who insisted that theory does not precede practice, nor does conception necessarily precede execution. Otabe argues that in fact, without foundation in the artists technique "no conception would be possible" (2009: 61). He questions, moreover, the absolute requirement for any initialising conception in the formation of artworks, rather the process relies on practice, habit and "what is already sedimented in the body as a physical technique ..." (2009: 61). A conception is not a prerequisite, progress is possible by quite different means:

Rather, a conception should reorder a habitus in order to shape while searching a form, or to search a form while shaping. It follows that neither the theory nor the practice precede; they interact with each other. In order to seek a form that does not clearly pre-exist in the mind, a form that cannot be executed by a routine technique, an artist conceives, and the conception remains incomplete until realized in a tangible form. In this sense, the inner Form [as in *disegno interno*] and the Form in the bodily [as in *disegno esterno*] cannot be distinguished; they are one and the same. (Otabe 2009: 61)

This further refutation of the Neoplatonic premise, with its understanding of the role of "habitus", chimes with much of recent research and theory in the areas of situated and enactive cognition – that, amongst other factors, emphasises the role of the body.

Situated cognition theory: The 3E, 4E and 6E models

Situated and enactive cognition theory opposes diametrically any Neoplatonic premise regarding the functioning of mind, its confinement to the cranium or its pre-eminence regarding cognition. The place of the mind in modern thought has, to some degree, been taken by the brain, so that the brain becomes equivalently sacrosanct in relation to cognition and epistemic functions. Neoplatonism dismissed the cognitive and epistemic significance of the body, the material environment and objects such as equipment and tools, and their significance in relation to knowledge generation and artmaking. Situated Cognition theory upends this hierarchy, giving the body, the environment and tools, used for example to extend human cognition, an enhanced status alongside the brain.

Robbins and Aydede (2009) provide a summation of the three principal tenets of ‘situated cognition’ theory, namely, “the embodiment thesis”, “the embedding thesis” and “the extension thesis”, as they explain:

First, cognition depends not just on the brain but also on the body (the embodiment thesis). Second, cognitive activity routinely exploits structure in the natural and social environment (the embedding thesis). Third, the boundaries of cognition extend beyond the boundaries of individual organisms (the extension thesis). (2009: 3)

This represents the 3E situated cognition model referencing these three theses – the embodiment, embedding and extension theses. Such theory partakes in what Shusterman (2013) describes as the “pragmatist picture of cognition” (2013: 49) that presents cognition not merely as embodied, embedded, and extended but furthermore, enactive (presenting a fourth E). He therefore references the “4E” combined situated and enactive model and he goes further proposing a “6E” model to include cognition’s “emotive” and “esthetic” (aesthetic) dimensions (2013: 50). But we shall concentrate on the 4E model here.

Robbins and Aydede’s “extension thesis” is of considerable relevance with regard to the practice of drawing. Drawing is rarely carried out without the use of equipment; drawing implements and supports. Extended cognition theory, notably advanced by Clark and Chalmers, who in their seminal text ‘The extended mind’ (1998), posits that when a “human organism” uses an object or tool, such as a notebook to merely jot down a to-do list, then they become “... linked with an external entity [tool or notebook] in a two-way interaction, creating a coupled system” that constitutes “a cognitive system ...” (1998: 13). This kind of “coupled process,” they argue, should have the same status as cognitive processes that takes place entirely in the head, even though a major part of the process happens outside the cranium. Therefore, along with the body, tools – including drawing equipment like pencils and paper, for example – can thereby be regarded as actual extensions of the mind out into the environment. Noë neatly remarks that this is founded on the concept that “the environment can drive and so partially constitute cognitive processes” (2006: 411).

Shaun Gallagher (cited in Robbins & Aydede 2009) points to Dewey’s prescient understanding, regarding his emphasis on the dynamics of the active agent in the environment. Gallagher tells us that for Dewey “the separation of mental experience from hands-on physical manipulation of the environment” is problematic both philosophically and in social terms. Dewey believed that “cognition is a form of action and not a relation between

a thinking that goes on in the mind and a behavior that goes on in the world” (2009: 39 - 40). Mind/body dualism, subject/object dualism and organism/environment dualism are for Dewey false, because we engage with our environment as agents rather than passively, in Dewey’s phrase like; “a cherry in a bowl” (Dewey cited in Bredo 1994). Mark Johnson, encapsulates the situated cognition stance – a radical interpretation of the “embedding thesis” – which emphasises agency, observing that, “subjects and objects are really just abstractions from the interaction of organism-environment-transactions.” (Johnson 2007: 67).

Newen, De Bruin and Gallagher (2018) refer to the traditional model within cognitive science as “the representational and computational model of cognition (RCC)” (2018: 5). Within this model – in direct line of inheritance from both Neoplatonism and Cartesianism – cognitive processes are presented as “(1) abstract ... processes that mediate between ... sensory inputs (perception) and motor outputs (action), and (2) computations over mental representations that are either symbolic ... concepts [in language or thought] ... or sub-symbolic (e.g., activation in neural networks ...)” (p. 5). In RCC the seat of cognitive activity is assumed to be the brain. However, the 4E model presents a wholesale reversal of RCC, as they explain:

Proponents of 4E cognition have argued against the assumption that cognition is an isolated and abstract, quasi-Cartesian affair in a central processing unit in a brain. [They assert that] ... cognitive phenomena ... such as spatial navigation, action, perception, and understanding other's emotions, are in some sense all dependent on the morphological, biological, and physiological details of an agent's body, an appropriately structured natural, technological, or social environment, and the agent's active and embodied interaction with this environment. (2018: 5)

The 4E model of cognition leads us to a holistic epistemology amenable to the truth claims of embodied ways of knowing, allowing us to examine in a new light, the situated and embodied aspects of *métier*, for example drawing. In this light drawing becomes a knowledge generating activity *par excellence*. Eric Bredo (1994), in discussing Situated Cognition theory, highlights its significance for a revaluation of the epistemic significance of the practice of drawing. He suggests that it is helpful to see drawing as a performance “the product of a history of relating in which both person and environment change over the course of the transaction”. Drawing, he tells us, is:

... a drawn-out affair [...] one draws, responds to what one has drawn, draws more, and so on. The goals for the continuation of the drawing change as it evolves, and different effects become possible. Acting with the environment in this way contrasts with acting

on it, because it presupposes that it will turn round and alter oneself in return. The production of a well-coordinated performance then involves a kind of dance between person and environment rather than the one-way action of one on the other. (Bredo, 1994: n.pag.)

We can appreciate descriptive drawing as a heightened mode of cognition, a knowledge generating activity with situated and enactive dimensions. Long understood as a heightened means of perception, drawing can be understood as a mode of thinking. For Rudolf Arnheim (1969) there is little to distinguish between perception and thinking. His list of the constituent activities of both are strikingly familiar to anyone who draws or considers the constituent activities of drawing:

... the cognitive operations called thinking are not the privilege of mental processes above and beyond perception but the essential ingredients of perception itself. I am referring to such operations as active exploration, selection, grasping of essentials, simplification, abstraction, analysis and synthesis, completion, correction, comparison. problem solving, as well as combining, separating. putting in context. (1969: 13)

Shusterman tells us that for Dewey, “Perception, judgment, action, and thinking, ... are never performed in absolute isolation but only in terms of a background contextual whole, a unity of experience that he calls “a situation”” (2013: 61). With reference to the enactive aspects of 4E cognition, Shusterman warns against “too sharp an opposition between thought and action”. According to “classical pragmatism” he reminds us:

... genuine thinking also involves action, as does all perception, because cognitive life is fundamentally active. ... our very perception or awareness of the stimulus always already involves actions of attention ... and also actions (such as locomotion or reaching) that bring us to encounter that stimulus and even shape that stimulus as a stimulus. (2013: 61)

The dualism inherent in Neoplatonism continues to cast, a long shadow over our attitudes to knowledge generation activities such as drawing. Whether it is the mind or the brain that is privileged, the roles of the body, the environment, our actions or our use of tools, all are still commonly disregarded. In 1916, Dewey complained of the “magnification in higher education of all the methods and topics, which involved the least use of sense-observation and bodily activity” (1930: 314). We may have come a long way since then, however more recently Elkins speaks of the continuing “immensely difficult” problem of the status of art production within the university (2009: 128). Conceptual and propositional knowledge remains the default epistemic model for the academy, whereas tacit knowledge and experiential ways of knowing with embodied, situated and enactive dimensions, epitomised

by drawing, are still commonly distrusted. The arguments of Newen, De Bruin and Gallagher (2018) regarding the persistent influence of the RCC is pertinent in this regard.

Despite recent developments in cognitive science that have seen the emergence of a 4E model of cognition, and the enhanced understandings outlined above, it is proving persistently difficult to counter these entrenched attitudes, biases and default settings.

The gestalt circle

We know now that the mind is embodied, in that it is not confined to the cranium, it is situated both in physiological, spatial and indeed social terms, it is often extended, through the use of equipment and tools, and it is enactive in ways that relate to and appropriate all of the forgoing attributes. Much like Johnson's and Bredo's descriptions we encountered earlier, Gallagher (2018) outlines the relationship between the brain, the body and the environment as a dynamically coupled structure (2018: 629-630).

On the enactivist view, referencing Viktor von Weizsäcker's metaphor of the gestalt circle (*Gestaltkreis*), the brain is not in the center of a circle issuing radial commands to elements on the circumference; it is rather one element on the circumference — one element of the system, along with body and environment. (2018: 630)

We might usefully expand this metaphor in order to accommodate the 4E model, to include on the circumference tools (and other equipment) that extend cognition (Clark and Chalmers 1998; Noë 2006) and facilitate action (see, Figure 1).

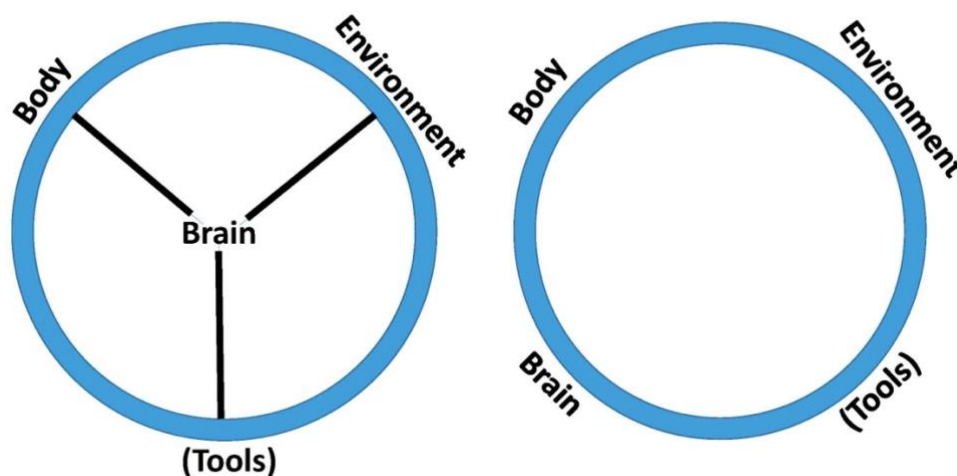


Figure 1. Illustration of an extended vision of Gallagher's description of Viktor von Weizsäcker's "gestalt circle (*Gestaltkreis*)" to include tools (and other equipment).

Neoplatonism's long shadow

Otabe (2009: 62-63) suggests that Neoplatonism continues to cast its long shadow over western thought, culture and the fine arts in relation to what he terms a “dematerialization that underlies the modern world” (2009: 62). As the subheading in his text; “Neoplatonist Counterattacks in the 20th Century” attests, he asserts that due to mass production and “the division of labor,” within the world of design, the value of the design product is “not determined by the "hand" of the executor” but is almost exclusively concerned with the idea, “design” or “model” which is valued pre-eminently over and above those qualities provided by the maker’s hand, in contrast to the values within what he describes as “traditional aesthetics”. Roberts refers to this using the term “deskilling” (2020). As Otabe observes:

It is, ... remarkable that the modern design follows the Neoplatonic view in distinguishing conception from production ... In this sense, the concept of the modern design that is opposed to that of traditional aesthetics can be regarded as a young, although troublesome and unwanted, offspring of Neoplatonism. (2009: 62)

The second example he gives is the Duchampian readymade. Duchamp, he tells us, remarked that as the instigator of the readymade it was essential for him “to cut my hands off” (as cited in Otabe, p. 64). This, Otabe suggests, “allud[es] to the idea of Raphael without hands.” And he suggests moreover that the Duchampian readymade is evidence that this Neoplatonic attitude “survived into the 20th century”. He cites in evidence Duchamp’s failure to respect the hand of the artist in terms of his rejection of the role of skill, coupled with a failure to respect what Otabe terms “the material of the creation” (2009: 62).

Conclusion

This triumph of conceptualism in the 20th century that Otabe references may be further reflected upon in light of Shusterman’s work in the field of somaesthetics (1999 & 2012) and more specifically his reference to a 6E model referred to earlier (Shusterman 2013). This, as we have seen, is a model of cognition which encompasses emotive and “esthetic” (aesthetic) dimensions alongside those embodied, situated and enactive dimensions. In this regard, a further illustrative example of the survival of the Neoplatonic stance is provided by Sol LeWitt (1967), who proclaimed with reference to his own conceptualist approach to artmaking:

In conceptual art the idea or concept is the most important aspect of the work. When an artist uses a conceptual form of art, it means that all of the planning and decisions are made beforehand and the execution is a perfunctory affair. The idea becomes a machine that makes the art. ... It is usually free from the dependence on the skill of the artist as a craftsman. It is the objective of the artist who is concerned with conceptual art to make his work mentally interesting to the spectator, and therefore usually he would want it to become emotionally dry. (1967: 80)

There can scarcely be a starker disavowal of the embodied, situated, enactive and indeed aesthetic and emotive dimensions of artmaking than in this famous credo, though it is perhaps surpassed by Danto's suggestion (Danto cited in Carroll 1998) that with Andy Warhol's Brillo Boxes "the history of art attained that point where it had to turn into its own philosophy" (1998: 21). Danto suggests that from that point onward the artist wishing to persist in the light of this new reality would need to follow something "very different" to the training that art schools traditionally provide, as he explains, these artists "would have to become philosophers" (1998: 21).

As Otabe recognises, such a view is by no means a novel phenomenon, nor, as the history of theory and education regarding drawing has shown, does it reflect a novel impulse. Might we not detect here the echo of far older qualms and quarrels?

Editorial reflections

The articles in this special edition touch on many of the themes addressed in the above discussion on multiple levels.

The constituent theses of the 3E "Situated Cognition" model, the, embodiment, embedding and extension theses are reflected in many of the contributions. Higgins-Stirrup professes a "Feminist approach" to epistemology that they explain "focuses on knowledge as situated, embodied, and firmly located in the phenomenal world". Borg's, Kussmaul's and Mayo's analysis of the role of the body's immersion within the environment (in Borg's case quite literally), reflect and illuminate several of the assertions of Situated Cognition theory. Kussmaul's research for example provides supportive evidence of the validity of all 3E theses, including the extension thesis, in relation to the employment of the "Mobile Working Kit". Mayo's discussion of the communal dimension of their residency-based project is also supportive of Robbins and Aydede's "second" tenet – the claim that "cognitive activity routinely exploits structure in the natural and *social environment*" (2009: 13, emphasis added). Berry-Frith's contribution also encompasses a communal dimension in its fascinating

account of the embedding of their artistic practice within a scientific milieu and the epistemic augmentation thereby provided to that extended, diversified community. Their reflections on the philosophical dimensions and implications of scientific imaging are perhaps echoed in Koutsoumpos' intriguing account – this time within an architectural context – of the philosophical meaning and epistemic ramifications, of act of drawing sections.

Most of the contributions reflect too on the enactive aspect of cognition (to complete of the 4E model), as evident in the enactive dimension of their drawing practices, particularly notable in Borg's, Kussmaul's and Mayo's accounts. Shusterman's 6E model encompassing the aesthetic and emotive dimensions of cognition is widely acknowledged, particularly in Berry-Frith's account but also in Higgins-Stirrup's acknowledgement of the emotive dimension, evident in her drawing works and perhaps echoed in her analysis of the "image" and "story" of that origin story of drawing, "The Corinthian Maid" and her identification of it as "a surrogate or an index of longing".

Hughes' discussion of the work of the British Artist Roger Ackling, while also informed by Phenomenology, provides an interesting counterweight to some of the arguments in the latter part of the above text, as part of their rigorous account of Ackling's methods and processes and the ideas and theory that animated his singular drawing practice.

I commend all these contributions to you.

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