Vygotsky's Janus-Faced Theory of Language: A Reply to Drain's "Tomasello, Vygotsky, and the Phylogenesis of Mind"

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In his lucid and helpful reply, Chris Drain (2021) clarifies some of his views and aims and offers pertinent criticisms of my own. Drain refocuses my forays into Pittsburgh Hegelianism onto Vygotsky's own thought. He rightly notes that Brandom's account of deontic scorekeeping tells us nothing about phylogenesis. Sellars too has little to say about the origins of language and social practice and I would endorse the projects of those who turn to Tomasello to fill such gaps (Koons 2018). However, I still do not think Drain has got Vygotsky's Hegel right. I do not think one can substitute "Hegelian" for "Janetian", and I hope to show why this matters.

Drain also objects to my characterization of Tomasello as Cartesian. There is of course a long line of philosophers from Deleuze to Dennett charging all those who fall across their path with covert Cartesianism. I will not besmirch this venerable custom here. In my reply I contrast the Hegelian-Marxist approach to language of Vygotsky with the Cartesian approach of Tomasello. I conclude by suggesting some active research programmes which overcome this Cartesiansim while following the trajectories of Vygotsky's own project.

A Brief Note on Hegel

Drain shares a Vygotsky passage which I admit sounds like Kojève's Hegel. But here is one area where I would insist on the convergence between Vygotsky and the Pittsburgh Hegelians: for both, words only have the meanings they do because of their function in a wider system. It is true that Vygotsky refers to the "slave and overseer" and to "submission", but what else does he mean by these words? As I suggested in my last piece, I think these designations illustrate something about the structure of concept development. We can tell this is not a Nietzschean story of social oppression and resentment because it is the individual who is *both* the overseer and the slave—and through successive reconstructive iterations. I will try to lay out what this means for Vygotsky in subsequent sections.

Is Vygotsky a Janetian?

Following Van der Veer and Valsiner (1988) Drain suggests that there are significant parallels between the work of Vygotsky and Pierre Janet, particularly in terms of the latter's "command-origin" theory of language. I will use Van der Veer and Valsiner as a foil to unpack what is at stake here.[1] Van der Veer and Valsiner suggest that Janet is the source for Vygotsky's general genetic law of development. Though Van der Veer and Valsiner concede that Vygotsky rarely cites Janet, they suggest that the only plausible explanations for the similarity in their descriptions of sociogenesis are:

      a) that Vygotsky was directly influenced by Janet, or
      b) that they shared a common influence in Baldwin or Royce.

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[1] While Van Der Veer and Valsiner try to promote Janet, I take it Drain views the links to Vygotsky as limitations. I am ultimately on Drain's side here. Anyone who wants to rehabilitate Janet has the corpus of Ian Hacking to contend with (Hacking 1998b, a). The reading of Janet I give in this reply is intended to be exegetical.

Van der Veer and Valsiner suggest there is no evidence for b) and that therefore a) is true. There are problems with this argument. First, here is Vygotsky (1997) in Volume 4 of his collected works:

> Initially, the sign is always a means of social connection, a means of affecting others, and only later does it become a means of affecting oneself. Many actual connections and dependences that are formed in this way have been explained in psychology. For example, we might point to the circumstance noted by J. Baldwin that has at present been developed in Piaget's studies. Research has demonstrated that there undoubtedly is a genetic connection between the child's argument; and his reflections. The very logic of the child confirms the basis of this. Conclusions appear initially in arguments among children and only later are they internalized by the child himself, linked to how his personality is manifested (103).

Vygotsky makes this point again some pages later (196), stressing the importance of *argument* in Baldwin's understanding of this process. Argument and drama, as I tried to show in my last piece, are crucial to Vygotsky's understanding of concept development, and are not something he found in Janet.

Second, if he had such a profound influence, why did Vygotsky extensively discuss Ribot, Freud and Piaget but not Janet? Vygotsky makes the genealogy of his thought clear in many of his writings and Janet hardly features there. Perhaps it is more of that sourly dissonant misanthropy and Vygotsky wanted to keep the close connection under wraps? But Vygotsky openly credits Janet as a source for his genetic law and yet, with the recent publication of Vygotsky's notebooks, Janet is still rarely mentioned. I suggest this is because Vygotsky liked Janet's formulation of this law but otherwise found his views of limited interest. Again, I'd emphasize that it is not about the words themselves but their function in a wider system.

Van der Veer and Valsiner quote Janet:

> According to the law that I discussed with you… every individual repeats in himself the social conducts… The child creates his individuality because one always mentions him in the same way and because one's behavior towards him has a certain unity.

And it's true, for Vygotsky too, the individual "repeats in himself the social conducts", but does Vygotsky think this is "because one always mentions him in the same way…"? It's clear Janet is talking about stimulus and response learning. As Van Der Veer and Valsiner quote: "Our actions are determined by those two great sources: the stimulations that come from the external word and the stimulations that come from society". I'd like to see where Vygotsky speaks of such behavioural conditioning. Here is a longer passage from Janet (1929):

> Social conduct is conduct which has its starting point in a kind of stimulation which is given by social objects. Social objects are living beings analogous to

us, which resemble us to a considerable extent... Social behaviours are
therefore behaviours determined by particular living beings. These conduits
are external conduits, just like the conduits towards a chair or towards a
sidewalk. They are behaviours determined by objects (113).

It is clear how we get from here to the "command-origin" account of language that worries
Drain: speech here is a matter of direction towards affordances. But this is just Pavlov's
theory of language as a "second signal system" (Windholz 1990). Indeed, Janet acknowledges
his debt to Pavlov (op. cit, 46). This would be a short reply if we only needed to find
critiques of Pavlov in Vygotsky. I'll just note one of Vygotsky's (1999) criticisms of Pavlov's
disciples which could as easily apply to Janet's version of sociogenesis:

> The very significance of social experience in this case is understood
> exclusively from the point of view of the presence of adequate models that
> the child finds in his environment … a series of stereotypic motor formulas,
> a series of motor patterns that the child uses in solving the problem (8).

Such Pavlovian accounts completely miss the cultural-historical character of the social; they
describe processes that are "mechanistic" and do not participate in the work of the intellect.
So, while it is true that both Vygotsky and Janet have a theory of the "social", what they
mean by this word is entirely different.[2] Let's look at Vygotsky's (1997) general genetic law
again:

> *Every* function in the cultural development of the child appears on the stage
> twice, in two planes, *first*, the social, then the psychological, first *between*
> people as an intermental category, then within the child as an intramental
> category (106, italics mine).

Granted, initial material for Vygotsky's law came from Janet, but there are clear divergences
in how Janet (1929) and Vygotsky understand and use this law:

> … you start with others and then apply to yourself what you have thought
> about others. This is sometimes true, sometimes it is exaggerated. I think we
> can say more simply that the two things are done at the same time and in the
> same way, we build others and we build ourselves, simultaneously.
> Sometimes one precedes a little, sometimes the other precedes. We start by
> constructing some ideas in ourselves, then we apply them to others, or,
> conversely, we form a certain idea of others and we apply it to ourselves
> (138-139).

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[2] Janet also speaks of higher psychological functions but, following Condillac, it is feelings/sensations that
constitute these for him. *The social* develops our personality because we come to share certain sensations; love
being key among them. I am not sure Janet can be substituted for Machiavelli any more than Hegel.

Most of Janet's writings consist of descriptions of empirical findings and here as elsewhere he criticises philosophers like William James through his own common-sense observations rather than on any rigorous philosophical basis. Vygotsky (2012, 171) appropriates this passage but does not agree with its conclusion.

Finally, what is strange about Van der Veer and Valsiner's article is that nowhere do they mention that Janet was preceded by Marx. Vygotsky found in Baldwin and Janet, expressed in psychological language, something already very familiar to him in the thought of Marx and Engels (1996): that "man first sees and recognises himself in other men." That is not to say that Janet's work is entirely without merit. Indeed, I will argue that it offers something that is missing in Tomasello.

Not Janet, But Janus

A fierce battle raged in French philosophy of the 1930s. On the one side was Hegel and on the other was Pierre Janet's close friend and confidante, Henri Bergson. Philosophers picked a side and developed their own views along these battle lines. Vygotsky was familiar with Minkowski's work showing the strong influence of Bergson on Janet and at one point Vygotsky refers to Janet as offering additional evidence for aspects of Bergson's philosophy (Zavershneva and van der Veer 2018, 137). Vygotsky thinks that Bergson and Janet were partially right about the role of "the word in volition" (118).

In his notebooks, Vygotsky plays Bergson and Hegel off against each-other to explore dimensions of language use. I do not have the space to explain Bergson's theories and Vygotsky's engagement with them here, so, in Bergsonian fashion, I will instead provide an image. A cliff face can be said to contain memory of the sea. As each wave hits the cliff, the cliff face as an image of the sea is altered. It represents the sea waves not in linear sequence but in quality and intensity. The cliff face is an image of both the sea's past and of its future, as each new wave rushes into the crevices formed by past trysts of rock and water.

Vygotsky suggests that if some aspects of Bergson's idealism were inverted, one could appreciate his attempts to naturalize concepts. Vygotsky agrees with Bergson that "word organizes a number of motor processes and elementary processes" (135) but criticizes Bergson for limiting his account to this kind of habituation. For Vygotsky, Bergson cannot distinguish between the effect of a word on thinking and the effect of hydrochloric acid on limestone (147); he does not appreciate the Hegelian dimensions of words, as intersubjective cultural-historical functions.

Vygotsky uses a psychoanalytic example to criticize Bergson. A traumatic event can alter one's mind at the level of the unconscious and motor habits, in ways that can perhaps account for the repetition of the trauma in neurosis, but for me to experience "this" as an image of that traumatic event Vygotsky suggests we need language in its discursive form (137). This is a Hegelian argument against Bergson but could equally be a Freudian argument against Janet. According to Janet the unconscious is a personality disorder: a weakening of psychic energy causes parts of the personality to be sacrificed into the unconscious. This is

because for Janet the personality is a loose assemblage of multiplicities. Vygotsky thinks that Bergson and Janet are wrong to assume we intuit multiplicities of particulars and then generalize from them. For Vygotsky, we need to generalize before we can grasp particulars.

Whatever his limitations, Janet was part of an important intellectual milieu which would give rise to thinkers like Merleau-Ponty. Bergson, Janet and James were among the first to bring to attention the role of proprioception, embodiment and volition to psychology. They were progenitors of what is today called *enactivism* (Gallagher 2020). Meanwhile, many contemporary enactivists have recruited Vygotsky to their cause (Baggs and Chemero 2019, van den Herik 2018, Shvarts and Abrahamson 2019). Di Paolo, Cuffari and De Jaegher draw on Vygotsky as well as Ilyenkov to provide a unique dialectical enactivist account of language development. They translate the kind of command and constraint structure that worries Drain into descriptions of dynamic biological systems:[3]

> Our view of symbolizing is that of an operation that linguistic bodies perform that is at once concrete and often spontaneous as well as embedded in the sedimented repertoires of previous operations of symbolizing. Symbols act as jointly used and created constraints that bring forth virtual flows in participatory sense-making. Speaking in dynamical terms, symbols act as metastable emergent constraints that modulate the processes of social interaction and mutually interlock with other symbols. (Di Paolo, Cuffari, and De Jaegher 2018, sec. 11.3)

Vygotsky cannot be called a traditional enactivist because he does not think meaning is reducible to the affective-volitional plane. He believes consciousness is composed of "dynamic-semantic systems" (Zavershneva and van der Veer 2018, xvii). Vygotsky wants to see words as both natural objects in the world, embedded in habits and causes, and as a part of discursive practices. Words as *natural objects* reify affective-volitional relations to things in the world (489) but as *discursive functions* they allow us to find meaning and give justifications (183). Sellars (1979) calls this the "Janus-faced character of languagings as belonging to both the causal order and the order of reasons".

For Vygotsky, while developmentally earlier functions can be characterized in terms of loops of perception and volition, the development of understanding depends on the capacity to be "oriented in the complex internal space that might be called a system of [sign] relations" (1997, 142). We can interpret this in terms of what Brandom and McDowell, following Sellars, have called "the space of reasons" (Derry 2013, 73). Reason and affect are never entirely separate, nor are they ever fully one—they are united in a dialectic of mutual subordination.

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[3] Though Vygotsky drops the term "command" after 1931, the account here is consistent with his broader Spinozist-Leninist conception of the recognition of necessity in self-determination (Derry 2013, 85-101).

Back to Baldwin

In his magnum opus on the phylogenesis of language, Terrence Deacon traces a long path through biology, anthropology, and neuroscience, and ending with Vygotsky's general genetic law of development. Deacon follows this path not via Janet but Baldwin. According to Deacon (1998, 336), it is language itself which exerted the pressure necessary for humans to develop language capacities. Primitive language use (perhaps derived from ritual gestures) gave societies an evolutionary advantage, and this culturally transmitted advantage was eventually "centralized" in our biology. I do not have space to outline Baldwinian evolution here, but here is a good gloss on it:

> We began our research with a psychological analysis of several forms of behavior that are found, not frequently it is true, in everyday, common life and are thus known to everyone, but are also to a high degree complex, historical formations of the earliest epochs in the mental development of man. These techniques or methods of behavior, arising stereotypically in given situations, represent virtual, solidified, petrified, crystallized psychological forms that arose in remote times at the most primitive stages of cultural development of man and in a remarkable way were preserved in the form of historical survivors in a petrified and in a living state in the behavior of modern man (Vygotsky 1997, 38).

For Deacon as for Vygotsky, the key to understanding the development of language is sign mediation. Far from having a simplistic Janetian theory of signs, Vygotsky has a multi-stage model. I will outline it using the Peircean categories used by Deacon.[4]

Iconic

When a child is developing their ability to use signs, what is important is not the correlation between signifier and signified but the expression of a move in a broader activity or language game.

> [A] child wanted to show in a drawing how it gets dark when the curtains are closed and he made a forceful line down on the board as if he was drawing a window shade. The drawing movement did not signify a cord, but expressed specifically the movement of drawing a curtain (Vygotsky 1999, 134).

The movement here is iconic i.e. it bears some spaciotemporal isomorphy with what it is meant to represent, though already refracted through social practice. Vygotsky suggests that even the drawing of a picture should first be understood in terms of discursive functions rather than representations.

Indexical

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[4] Something like the categories of firstness, secondness and thirdness are also present in Vygotsky via his use of the Hegelian triad (Vygotsky 1997, 104). These help us to consider behaviour prior to symbolic activity.

As the child develops mastery in symbolic activity, she moves from expressing intentions in direct action to enacting a "plan of action", for example in assigning different household objects to function as different buildings of a town. A clock can represent a pharmacy for a child not because it looks like a pharmacy but because it is able to embody the child's intentions in pretend play e.g., she can walk the doll from the clock tower to the pharmacy or talk about different numbers on the clock as different medicines. At this stage, the plan is particular to and shaped through the situated activity (136). The child relies on indexical relations between the object of their activity and the mediating artifact. According to Deacon this is where we leave behind our primate neighbours (and, I'd argue, Janet). A vervet monkey barking in response to a leopard does not mean anything else by its call (Bickerton 2009) i.e. it does not subject itself to any further commitments or implications (Derry 2013, 60).

Symbolic

Finally, the plans of action are *reified* or *crystalized* in the object. In new situations the children can go and grab the clock to mean "pharmacy" though the connection to the concrete activity through which it was baptised a "pharmacy" may be forgotten. Here, the external sign is internalized, so that a stick acquires the seemingly inherent affordances that make it an appropriate horse in various role plays, even to new players. The objects of play, like words, are Janus-faced: "In play, real properties of the thing and its symbolic significance exhibit a complex structural interaction" (Vygotsky 1999, 9). Vygotsky suggests that this is also what happens in language learning. Words acquire functional roles for us through this multi-staged process of enculturation. As Sellars (1960) suggests, such practice-centred approaches avoid the Cartesian trap of having to account for the appearance of different "mental contents".

There is nothing inherent either about objects or thoughts which makes them iconic rather than indexical or symbolic. Rather, the distinction depends on the interpretative activity in which the sign functions. What is unique about humans is the way in which social activity restructures *all three* levels of signification. So that, for a human child, the range of icons and indices on which symbols can rely (sic. *intentionality*) is indefinitely extended.

Vygotsky suggests that embodied actions like the miming of drawing a curtain can be thought of as analogous to but developmentally earlier than full-fledged language use. Vygotsky does not agree with Bergson that a representation is something that appears to intuition and is then corrupted by language. That a picture of a doll is representing her doll is something Vygotsky suggests the child must learn; it is not given by the picture itself (op. cit., 135). Nelson Goodman (1976) gives another example. When ethnographers showed people living in cultures with no experience of photography a photograph of their own house or village, they could not recognise them in the photo. We do not start with representations on which we can introspect.

Enculturation allows a child to orient herself in her environment using icons and indices before she has full grasp of concepts that supervene on these icons in her society. The *dynamic* or *affective-volitional* plane is something we share with other animals, but behaviour on this plane is limited to iconic and indexical interpretation. Humans, meanwhile, are at home in the *semantic* plane, which is a unique aspect of the ecological niche we have constructed. Semantic activity depends on and is a species of affective-volitional activity, but semantic activity has no outer boundary, thus "the higher functions permeate the lower and reform all of them, even the deepest layers of behaviour" (Vygotsky 1999, 44).

Is Tomasello a Cartesian?

The few times Tomasello mentions the body in the book he sees as the culmination of his work, *Becoming Human*, it is generally to describe someone *observing* their own or an other's body (Tomasello 2019, 48, 279, 282). As Di Paolo, Cuffari and De Jaegher suggest, Tomasello has inherited the Cartesianism of traditional cognitivist psychology in thinking of language in purely informational terms: Tomasello does not seem to appreciate the ways in which the embodied materiality of language can shape human development in ontogenesis and phylogenesis, via the fragile dynamics of consciousness (Di Paolo, Cuffari, and De Jaegher 2018, 200).

Some of Tomasello's most important findings have arguably been on the role of joint attention in sociogenesis. But Tomasello also suggests that all joint attention relies on us having *shared intentional states*. It is here that I think he is most Cartesian (in ways that remind me of Searle). What are intentional states and how can we share them? Do we need another intentional state to know if we're sharing them correctly? Why not just say that when we see a chess piece on the board what we share is the knight right there in front of us, as it appears in our activity? As Hegel argued, we do not need to worry about the correlation between a noumenal realm and mental phenomena because we are already dealing with a world of publicly available things. Ilyenkov called this *the ideal* (Ilyenkov 1977).

Like Sellars (Seibt 2009), Vygotsky thought that when we speak we are literally thinking out loud: our thoughts are in our words and we are sharing our thoughts in the conversation. When I play the trumpet, my thoughts and intentions are in the playing; as I play, I respond to the trumpet and perhaps to those I play with, not to intentional states in my head. What happens over our individual and collective history is that some signs are crystallized and function as habits. As humans we can also break off from the affordances affecting us to improvise and create something new (Zavershneva and van der Veer 2018, 386; Vygotsky 2004). Plans, shared or otherwise, are such crystallizations; play is their obverse.

We can describe the transitions here in terms of *higher and lower grade normativity* (Seibt 2009). We do no not need to posit, along with Tomasello, that we come into this world hardwired Rawlsian Liberals (Tomasello 2019, 240): we do not have to attribute to toddlers abstract

concepts of mutual respect, equality and trust (191),[5] there are lower grade more local and iconic/indexical responses that can follow the patterns of these higher grade rule systems (Beisecker 2013).[6] I'd argue Tomasello rejects this option because he does not appreciate the Janus-faced character of signs. Considering whether iconicity plays a role in symbolic gestures, Tomasello (2009) concludes that "symbolic gestures are the same as spoken symbols … in being only conventionally connected to their intended referents" (34-35). But why must these options be mutually exclusive?

To exclusively privilege coherence with social convention leaves us, as McDowell memorably said of Davidson, with frictionless spinning in a void. The evidence Tomasello offers for this conclusion presupposes the *intentional state* framing. He suggests, "in experiments, 18-month-olds are unable to use iconicity to understand an adult's specific communicative intention"—but why assume they should? Secondly, he claims that "in the earliest stages, deaf children learning sign language are not helped by the iconicity of many sign language signs", and we may infer that "arbitrary gestures" would have done just as well. But this seems like a selective reading, overlooking the many ways in which sign language is clearly characterized by iconicity (Padden et al. 2013; Thompson et al. 2012).

The Vygotsky-inspired experiments of the Zagorsk Children's Home for the Death and Blind show that we do not need to put conventions and intentions on one side and the resistance of matter on the other (Ilyenkov 2007). That signs and gestures are learned through enculturation does not mean that they are immaterial.[7] If the Vygotskian account later expanded by Ilyenkov is right, the process by which a thing comes to stand for another thing relies not on prior mental abstraction but dynamic isomorphy with wider concrete activity systems.

In the Beginning was the Deed

By way of a conclusion, I come to the work of the developmental psychologists Racine and Carpendale. Racine and Carpendale tie up many of the trajectories I have sketched while actively reinterpreting Tomasello's findings (Racine and Carpendale 2007 a, b, c). Racine and Carpendale's central criticism of Tomasello can be summarized in their claim that his theorization of child development falls foul of Wittgenstein's private language argument. By presupposing intentional states prior to socialization, Tomasello is committed to a circular notion of inner labelling of mental contents. An intention exists "embedded in its situation":

> In their interactions with others, children do not observe a pattern of activity
> and then go about computing the underlying meaning; children instead come

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[5] As Alasdair Macintyre has argued, you cannot learn "good" in the abstract. Knowing what a good or fair number of cookies is presupposes knowing what cookies are at some level (MacIntyre 2013).
[6] This is the picture of social practice Vygotsky gives in his concept of the *zone of proximal development* (Zaretsky 2021).
[7] The complex dynamics here were explored in Marx's analysis of commodities (Ilyenkov 2008, 88) and Sellars' discussion of picturing and signifying (Seibt 2009).

to see psychological concepts directly in such patterns of activity (Racine and Carpendale 2007a).

This conclusion is one we find in the work of Ilyenkov and others following in Vygotsky's footsteps (Ilyenkov 1974). It is a view Siyaves Azeri (2021) explores more fully in his last reply to Drain.

As Racine and Carpendale (2007a) argue, "words derive their meanings from the role they play in patterns of human action and interaction; language is the refinement that gives us the ability to make finer distinctions." What Vygotsky's explorations help to bring into sharper relief is the Janus-faced nature of language development as involving affective-volitional systems entwined in our environment and their dialectical unity with cultural-historical systems constituting our conceptual space.[8]

This unity is embodied in the sign.

> There is a genetic, but not a logical, contradiction between the claim that higher mental functions, an inseparable part of which is the use of signs, arise in the process of cooperation and social intercourse, and the other claim that these functions develop from primitive roots on a base of lower or elementary functions, that is, a contradiction between the sociogenesis of higher functions and their natural history (Vygotsky 1999, 10).

Final Thoughts

One decidedly Hegelian-Marxist aspect of Vygotsky's work is his approach to reading. Playing off a plethora of thinkers against each-other, he reads each seriously and finds what is valuable to the problem at hand, synthesizing their ideas into a qualitatively new form.

In his reply Drain characterized Vygotsky as "Janetian", only then to reject both. I have argued that this attempt to poison the well is unwarranted. The advantage of aligning Vygotsky with Baldwin instead of Janet is not just that Baldwin is a more coherent thinker, but that Baldwinian evolution is more resonant with the explicit Marxist orientation of Vygotsky and his followers. The reading of Baldwinian evolution advanced by Deacon brings this work within reach of Engels and the theory of human nature so important to Vygotsky.[9]

While both Deacon and Tomasello describe the ratchetting effect of human culture, for Deacon it is shared symbols and not shared intentions that are key here. In our phylogenesis, it is not beliefs and intentions that make a difference but customs and practices. If I am born in a culture with certain marriage customs, it is not that I share intentions with others in my

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[8] I'd argue that Vygotsky coined the term "word-meaning" to signal this dialectic.
[9] Deacon, personal communication. He also suggests external constrains help to solve problems of downward causation (Deacon 2011, 161).

culture but that this is what marriage actually is as an object in my world, about which I may then form beliefs (Lipatov, Brown, and Feldman 2011). As Racine & Carpendale have argued, we can appreciate Tomasello's many innovations while rejecting some of his mentalistic language and giving due emphasis to embodiment.

There is much I agree with and many points I've not done justice to in Drain's critique, but I am thankful for the stimulating dialogue.

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