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Participatory sense-making in deep disagreements: enriching multi-modal theory of argumentation with the enactive approach to linguistic bodies

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ABSTRACT

Deep disagreements — conflicts that concern issues of existential importance — pose a challenge for traditional argumentation theories. This paper explores how such disagreements unfold in dialogical exchanges, particularly in emotionally and existentially charged contexts. Using the movie *We Live in Time* (2024) as a case study of deep disagreement on procreation, we note that the multi-modal theory of argumentation seems initially promising but is ultimately limited as far as overcoming deep disagreements is concerned. This paper aims to remedy these limits of multi-modal argumentation by utilizing the enactive tool of participatory sense-making. While multi-modal argumentation facilitates resolution through mutual understanding and seeking of interlocutor's shared grounds in most mundane disagreements, we argue that it remains insufficient in deep disagreements. This is because in deep disagreements the shared grounds between the interlocutors' respective positions are missing. By discussing qualitative sociological research on reproductive decision-making, we argue that what is needed in such cases is co-creation of new meanings between interlocutors. We propose integrating the enactive approach to participatory sense-making with multi-modal argumentation and we test the efficacy of this intervention by analyzing some crucial scenes of *We Live in Time*. Our final picture explains how participatory sense-making can help couples transform their deep disagreements into new meanings over a span of a shared form of life.

1. Introduction

Disagreements are an inevitable feature of human communication, shaping our interactions in both daily and high-stakes contexts. Lately, disagreements regarding whether people should have children have become more common in both public and private spheres (Sec. 2). This merits attention, especially because disagreements regarding procreation seem to resist resolution via argumentative means — and not merely due to a lack of evidence or faulty reasoning, but because they emerge from deeply entrenched differences in the interlocutor's existential concerns. These so-called deep

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disagreements, such as disagreements about vaccination, abortion, or — as we argue — childbearing, pose a challenge to traditional argumentation theories, which often presume that agreement is eventually reachable between two proximately rational agents (Sec. 3). How, then, can individuals engaged in such disagreements move forward when argumentation seems ineffective?

One promising answer is provided by Michael Gilbert's coalescent or multi-modal argumentation (Sec. 4). This framework has expanded the understanding of disagreement beyond purely propositional reasoning, emphasizing the role of emotions, body, and intuition in argumentative exchanges. This approach seems highly promising for handling deep disagreements as it recognizes that argumentation extends beyond a matter of logical inference because it also involves affective and arational dimensions. As such, multi-modal argumentation invites the interlocutors to mutually uncover their values, desires, needs, and beliefs through repeated, non-adversarial argumentative exchanges. The hope of this approach is that interlocutors will discover and "coalesce" on shared points of agreement rather than attempt to change each other's minds.

However, despite the initial promise of multi-modal argumentation, we will argue that it is ultimately unable to guide the interlocutors towards a positive *transformation* of their deep disagreement (Sec. 5). The reason is that in deep disagreements there are, by definition, *no shared grounds* upon which the parties could coalesce. What multi-modal argumentation needs, we submit, is a way to create a *new kind of sharedness.* Not in terms of Gilbert's shared grounds but of *participatory sense-making.*

In this paper, we develop a proposal of participatory sense-making through a case study of an emotionally charged disagreement about procreation as depicted in 2024 movie *We Live in Time*. Our approach to participatory sense-making is based on enactive cognitive science that highlights the embodied, interactive, co-constitutive and diachronic nature of meaning-making in social interactions. Rather than viewing disagreements as conflicts to be resolved, the perspective that we put forward suggests that disagreement itself can be a generative process — one in which meaning is actively created through interaction in processes of co-becoming. Meaning is existentially laden, in enactive terms. This is because human beings are sense-makers that take an existential stance in their relations with others and the world (de Haan, 2020). They skillfully co-create meanings, moved by their existential needs and affective concerns (Candiotto, 2022), commitments and values (Candiotto, 2023; Weichold and Candiotto, 2023). We argue that this existentially charged process of participatory sense-making provides an account of how interlocutors in deep disagreement may engage in an ongoing process of co-constructing new meanings, even when fundamental differences remain (Sec. 6). By integrating participatory sense-making with multi-modal argumentation, we propose a normative framework for understanding how deep disagreements may be transformed into new meanings. We hope to move argumentation theory into a new and interesting area of research with our novel[1] proposal.

2. "We Live in Time" and a disagreement on procreation

We base our exploration on the conflict regarding whether to have children as it is depicted in the movie We Live in Time (2024). The movie follows snapshots from Tobias and Almut's life as they go from being strangers to being a family of three. Their life is met with a tragedy when Almut is diagnosed with ovarian cancer, which is initially mitigated with chemotherapy, but nevertheless returns later in the story and is ultimately fatal for Almut. The discovery that Almut is sick plays a crucial role in the central conflict of the movie, which is Tobias and Almut's differing views on whether to have children. It is this conflict — and the fact that our couple overcame it — what we will focus on.

There is more than one reason we are especially interested in the disagreement on procreation. First, with global fertility rates falling (Bhattacharjee et al., 2024), the arguments concerning procreation are ubiquitous in public discourse. Falling fertility rates are said to be a worrying phenomenon because of the adverse effects it poses for the proper functioning of a society. Hence, many governments are introducing policies to incentivize creation of nuclear families. Importantly, such incentives include rhetorical appeals[2] by politicians and pundits directed at women to prioritize they life choices around childbearing.

The second reason for our interest is the increasing traction of *anti-natalism* or *voluntary childlessness* movement or worldview. Anti-natalism is the view that it is morally wrong to bring new people into the world. The usual argument asserts that one has the obligation to prevent suffering more than one has the obligation to cause pleasure. And because

[1] As far as we are aware, there are only a handful of works that come close to our project and fewer still that resemble it. For instance, Richard Hirsch (2010) explores sense making in conversations, but not disagreements and not from an explicitly enactive point of view. Sune Vork Steffensen (2012) deploys enactive tools to analyze conversations, but does not focus on disagreements. Miranda de Figueiredo et al. (2025) deploy enactive tools and focus on disagreements in romantic relationships, but do not draw conclusions for the study of argumentation. Menno M. van Calcar (2023) deals with argumentation from enactive perspective, but only with what Daniel J. O'Keefe (1977) calls argument$_1$ (whereas we are interested in argument$_2$, i.e. in an argument as a dialogical exchange). He is also interested in argumentation only insofar as education of argumentation skills in the classroom is concerned. Lastly, Marilyn M. Cooper (2011) introduces enactive perspectives on embodiment and sense making to the examination of responsible rhetorical agency. Cooper's work is thus the closest to resembling our own project. She is, however, interested in argument$_1$, whereas we are more interested in argument$_2$.

[2] This is not to imply that such appeals are always made in good faith — we are well aware of close ties between pronatalist rhetoric, (white) nationalism, and misogyny (Perry et al., 2022; Rasmussen, 2023).

existing in the world necessarily involves at least some amount of suffering, one has the obligation to refrain from bringing new people into the world even if this would also cause pleasure to them or to oneself (Benatar, 2008). As provocative as this philosophical argument might be, however, anti-natalism nowadays is motivated by more down-to-earth reasons, such as economic hardship, rejection of cultural norms and expectations, personal freedom, or political and climate instability (Matthews and Desjardins, 2017). Anti-natalism stands in direct opposition to the appeals mentioned in the previous point, making discourse on procreation a site of passionate disagreements.

Lastly and connectedly, we are inspired by Ondřej Beran's (2022) challenge to the prominent idea that the way we should understand these disagreements about whether to (not) have children is as being primarily argument-based[3]. Childless persons – especially women – are often met with a ridicule that they will not have anyone to take care of them when they get old. This is, at least sometimes, meant as an *argument* that aims to persuade the person to have children. Beran argues, however, that it is a mistake to assume that the final decision is always based on such arguments. Instead, decisions (not) to have children, Beran continues, are better understood as akin to the decisions to marry. That is, not as something solvable by arguments, but rather as an existential choice reflecting who one is. As one participant in the studies we mention later summarizes it: "having children isn't good or bad. Just life changing" (Yu et al., 2023, p. 56). When it comes to decision to (not) have children, arguments are but a small part of "complexes of how we relate – in emotions, reflection, bodily flexions, evaluations, assessments, humor – to ourselves and others" (Beran, 2022, p. 64). We are sympathetic to this line of thought and for reasons outlined by Beran believe that the issue of procreation is well poised to elucidate the limits of argumentation theories vis-à-vis their applicability in everyday life.

When it comes to the movie's depiction of the conflict, we are particularly interested in two moments – one which sets up the conflict and the second in which the conflict has already dissipated. In what follows, we will provide a description of the conflict and argue that its eventual resolution does not come solely out of an argument-based deliberation. On our interpretation, it emerges over a span of a shared form of life in which the couple engages in processes of sense-making about themselves and their future *in addition* to argumentation.

3. A case study of deep disagreement

We start with the scene that finds our protagonists, already a few weeks into their relationship, laying out the cards on the table in regard to their views on having children.

The exchange starts with Tobias bringing up Almut's prior remark that "kids aren't really [her] thing". Tobias goes on to point out, hesitantly, that he respects that, but adding with a stutter that kids "kind of might be", correcting himself to "are", his thing. Almut listens quietly, moving her body to face Tobias. Tobias tries to reason that Almut's biological clock is ticking. To this, speaking up for the first time in this scene, Almut upsettingly retorts "I'm sorry, but what the actual fuck are you even talking about right now?" With the hint to back off notwithstanding, Tobias tries to explain that he would prefer to have a "moderately awkward conversation right now rather than a completely destructive one in five to 10 years' time".

But Almut has none of it: "Firstly, I'm thirty-four, not fifty-fucking-five, so how about we ease the fuck up on the whole biological clock bullshit thing? And secondly, I don't know, I'm, like, 'Back the fuck off'". Almut finds the speed at which Tobias is tackling the question of procreation unwarranted, asking him "What's the rush?"

Tobias goes on to offer an explanation by confessing to Almut that he is "about to" fall in love with her. We read this proclamation as saying that Tobias does not want to fall for someone who is closed off to the possibility of having children, so he needs to know that Almut is not like that before allowing himself to fall for her fully. To this, Almut apologizes and explains that she is not "someone who's interested in making that kind of a promise". As we learn from other scenes, Almut is an excellent and highly competitive chef, with many prizes from culinary competitions under her belt. Furthermore, Almut is in another scene depicted rejecting heteronormative organization of family, particularly the institution of marriage. All of this suggests, we submit, that she likely cannot imagine herself putting aside her values for the sake of raising children – she is not someone who is interested in doing so. That is why she cannot promise anything to Tobias, going as far as to reproach Tobias for asking this of her: "And in fact, there's this little bit of me that thinks 'Fuck you' for even asking". After a pause, Tobias leaves without a word, which act of withdrawal we read here in line with (Tanesini, 2020) as a form of dissent, rather than a form of concession. We later learn that the pair did not contact each other for weeks after this fight, so at this point, it looks as if the couple has broken up.

We think that this scene sets up one of the two central conflicts of the movie (the other being Almut's hesitancy to give up her lifestyle in order to proceed with her cancer treatment). At this point, we would like to bring attention to the fact that Tobias and Almut's conflict on childbearing closely resembles what is in epistemology known as "deep disagreement." A deep disagreement is a term of art originally introduced by Robert Fogelin (1985) to denote a kind of disagreement where classical argumentative means find no purchase due to arguer's lack of shared "common ground." In Fogelin's case, this shared ground amounts to the arguers' implicit agreement on what counts as evidence or what is the proper way to overcome disagreements. When such ground is not shared in a disagreement, this precludes it from being "subject of rational resolution" (Fogelin, 1985, p. 7).

[3] See also (Kane, 2023).

There are many conceptions of deep disagreement that expand upon or differ from the one offered by Fogelin (for review, see Ranalli and Lagewaard, 2022a). We mention three main traditions. First, some authors maintain that the "common ground" invoked by Fogelin is constituted by the "fundamental epistemic principles", or principles of proper knowledge acquisition which, however, cannot be justified if we do not already accept them (Lynch, 2016). Second, others invoke not fundamental epistemic principles but "hinge commitments" in the place of the "common ground", which are non-rational beliefs that serve as a condition for the possibility of rational justification (Johnson, 2022; Wittgenstein, 1972). Both groups assert that if the arguers do not share fundamental epistemic principles/hinge commitments, they are in deep disagreement and argumentation (i.e. giving of reasons to support a standpoint) will not work for them. And third, some authors eschew the talk of "common ground" altogether, arguing instead that *any* kind of disagreement can in principle become deep, where "depth" arises not due to arguers lacking "common ground", but rather because of the pragmatic inability of the arguers to resolve their differences (McGlynn, 2023). On these accounts, even disagreements that persist simply due to the arguer's epistemic vices (e.g., close-mindedness) are said to be deep.

Based on this rough overview, it should be clear that not every conception of deep disagreement is suitable for the questions we are asking in this special issue – questions concerned with situated affectivity in language rather than with epistemology. What is more, it is an open question as to which account is theoretically the most sound, or whether the accounts are even exclusive (Melchior, 2023). Ever since the term of deep disagreement was introduced, it has been a subject of a lively scholarly debate as to how exactly should we conceptualize depth of disagreements (Ranalli and Lagewaard, 2022a) or whether they truly are irresolvable by arguments (Ranalli and Lagewaard, 2022b). Considering all this, we take the liberty to align with the account that resonates more with our intentions since it sheds lights on the existential dimension of Tobias and Almut's conflict. But before introducing the conception of deep disagreement that we shall deploy here, which is going to draw on the axiological account of Duncan Pritchard (2023, 2025a), we first need to motivate our treatment of Tobias and Almut's disagreement as deep.

One way to do that is to see whether it displays *desiderata* or *features* that any deep disagreement must have and showing that Tobias and Almut disagreement does in fact display these desiderata. Which desiderata are that? Chris Ranalli (2021, pp. 984–985) lists four desiderata that any theory of deep disagreement must account for, so we can use his list. For him, a disagreement is deep when the disagreement is (1) genuine and not a mere misunderstanding; (2) the parties of the conflict give reasons for their respective positions; (3) the conflict is systematic, meaning that the parties disagree not only about one proposition, but on a whole array of other propositions connected to it; and (4) the conflict is persistent, which is not to say, however, that it is necessarily irresolvable with arguments[4].

We think Tobias and Almut's case meets the bill, for they do genuinely disagree on whether to have children (1); they do give reasons for their respective positions (2); they disagree not only on whether to have children, but also on, say, whether it is even appropriate to bring that conversation up at this time or whether one should prioritize work over family life (3); and as we will see in the following exposition, their conflict persists for months if not years (4). It therefore seems that Tobias and Almut's disagreement is deep, and we shall treat it as such.

That said, we still need to supply a particular account of *why* Tobias and Almut's disagreement is as it is. In other words, we need to supply a theory of deep disagreement. As we explained, there are many contestants, and not all are suitable for the exploration of situated dimensions of language and emotions in disagreements on procreation. For the sake of our overall argument, we believe that Duncan Pritchard's (2025a, 2023) "axiological" account of deep disagreement is a solid choice. The primary motivation behind our choice, following Ondřej Beran's (2022) argument introduced in Sec. 1, is that we do not see disagreements about childbearing as a question of a mere practical rationality. That is, we do not view potential parents as self-interested maximizers that deliberate and decide to (not) have a child based on what course of action brings them the most utility. Quite frankly we think that picture is silly. Instead, potential parents are amalgamations of often contradictory desires, attitudes, and values. And it is values, not economic rationality, what often underpins disagreements on whether to have children – as we will see in both Almut and Tobias' case and in our second case study in Sec. 5. Given that Pritchard grounds his account of deep disagreement in *existential values*, we think his conception is a perfect fit for the type of disagreements we are exploring here[5].

Building on his earlier account (Pritchard, 2018), which itself stands on Wittgenstein's (1972) exploration of the limits of doubt, Pritchard asserts that deep disagreements are disagreements over issues of "existential importance" to the arguers. Such issues are characterized as something concerned "not just with core commitments of one's worldview, but more specifically with commitments that capture our deepest values; what we care about at a basic level" (Pritchard, 2023, p. 2). Importantly, these *axiological hinge commitments*, as Pritchard calls them, are immune to rational scrutiny, as they themselves comprise the very ground or framework where rational evaluation can take place (Pritchard, 2018).

Another important feature of axiological hinge commitments is that they are not the sort of things that we could adopt upon rational reflection or strategically. A paradigm case of a manifested axiological hinge commitment would be a belief

[4] It is being actively debated whether argumentation suffices for resolving deep disagreements. See, e.g (Godden, 2019; Kiš, 2025a; Lavorerio, 2020; Manhire and Kronqvist, 2025; McGlynn, 2023; Phillips, 2021). In line with Duncan Pritchard's (2024, 2018) views, whose account we deploy in our work, we take it that arguments help toward the resolution of deep disagreement, but are very unlikely to be sufficient by themselves to that end. See also footnote 6 below.

[5] Duncan Pritchard seconded our choice in personal Correspondence.

that "It would be morally wrong to pour gasoline on a cat and ignite it just for fun" (Pritchard, 2025a, due to Johnson, 2022). Such a belief is not a result of "judgment that is grounded in reason but is rather manifest in action" (Pritchard, 2025a, p. 15). It is something "inherited" and deeply entrenched on a "visceral" level of our being (Pritchard, 2025a, passim). We *live* it rather than deliberate on it. Note that this does not mean we can be in deep disagreement without being aware of it. At one point Pritchard maintains that for the disagreement to count as deep, our axiological hinge commitments must be reflected in our considered judgments (Pritchard, 2023). In other words, it is not as if Almut was simply not in the mood to talk about procreation at that moment. Instead, her not wanting to talk about it is a reflection of something much deeper about her character.

This also explains, finally, why disagreements over axiological hinge commitments are exceptionally "difficult to resolve, at least through normal rational means" (Pritchard, 2025a, p. 16). "The axiological import of these commitments means that they tend to be held with high levels of conviction" and a direct[6] contestation of one's axiological hinge commitments is bound to be ineffective (Pritchard, 2023, p. 7). What is more, such contestation is likely to elicit negative emotional responses. For when our axiological hinge commitments are concerned, we care deeply about being right. We have a "skin in the game", as Pritchard puts it. This is what makes deep disagreements essentially emotionally charged (cf. de Ridder, 2021; Kiš, 2025a; Lavorerio, 2023).

We have started to introduce *We Live in Time's* conflict on procreation and hope to have shown that it is a likely case of deep disagreement. Next, we want to turn our attention to scenes that find our protagonists expecting a child.

4. Multi-modal argumentation

Let us continue with the moment that sees the couple in a wholly different state of mind concerning children. Eventually, Tobias and Almut do intentionally conceive and the way the movie builds up to that excellently illuminates the process that has led to that moment.

We stated above that during her life with Tobias, Almut is at one point diagnosed with ovarian cancer. She decides to undergo a less invasive type of treatment that is risky but leaves Almut an option to get pregnant. In explaining her decision, she tells Tobias that just "because I never, in a general sense, saw myself having kids, doesn't mean that there isn't a world where I couldn't see myself, in time, deciding to have them with you". Then, after an undisclosed amount of time, Almut surprises Tobias with news that she is in remission. After *celebrating* the news, the scene that follows sees our protagonists awaiting the result of a pregnancy test.

What the movie is trying to communicate with this sequence of scenes, we suggest, is that Almut's transformation happened over a period of time and that an important role in this change was played by her life with Tobias and her experience of facing and overcoming ovarian cancer. Note why Almut does not choose to proceed with a more invasive type of treatment, which would leave her without ovaries and uterus. It is exactly because she gained the ability to imagine having children with Tobias by living with him. This new stance is in a striking contrast to her initial view, wherein she was unwilling to even contemplate the idea of having children. So, what happened between the initial conflict and the moment Almut's decision to undertake the less invasive type of treatment? What had caused this transformation?

The movie does not show us this, so we wish to take that as an invitation for us to offer our own interpretation. More than anything else, we would like the interpretation we offer to serve as a ground for exploring and testing the possibility of a dialogue between argumentation studies and the enactive approach to social understanding. Our claim is that argumentation studies can be enriched with the notion of *participatory sense-making, which shows how mutual transformation can emerge out of embodied interactions in sharing a form of life.* This perspective helps us to stress processes of ongoing becoming as a crucial existential feature for a possible positive transformation of deep disagreements.

Our interpretation starts by analyzing the course of the disagreement between Tobias and Almut from the perspective of argumentation. To that end, a non-exhaustive list of argumentation theories[7] is available to us, including pragma-dialectical (van Eemeren and Grootendorst, 2004), virtue (Aberdein and Cohen, 2016), or rhetorical (Perelman and Olbrechts-Tyteca, 1991) theory. Which one do we pick? We are sympathetic to Harvey Siegel's (2023) thought that argumentative exchanges "can be evaluated along several dimensions, all of which are perfectly legitimate though not of equal priority from

[6] Fending off the charge of epistemic relativism, Pritchard maintains that in changing our axiological hinge commitments, rational evaluation and arguments do play a role, but only an *indirect* one. For all our hinge commitments, axiological or not, "are manifestations of an overarching commitment that we are not radically and fundamentally in error in our beliefs," called *über hinge commitment* (Pritchard, 2018, p. 1120). And because our broader beliefs reflect, and are reflected in, our hinge commitments, should "one's beliefs change, then so too, over time, can our specific hinge commitments change as well. (Think, for example, of the hinge commitment that one has never been to the moon)" (Pritchard, 2018, p. 1122). So, arguments play a role in changing hinge commitments by changing one's broader set of beliefs first. See also (Pritchard, 2024, 2025a, 2025b) for a detailed discussion. See (Gariazzo, 2024) for critique.

[7] See (Siegel, 2023, 2024) for critical review.

the point of view of argumentation theory", and so we do not necessarily see the options as mutually exclusive. On the contrary, we hope that all these theories will eventually get in contact with the enactive program. Nevertheless, to keep our discussion manageable, we shall proceed with Michael Gilbert's (2022, 2014, 1997) *multi-modal* theory of argumentation[8].

This theory asserts that the aim of argumentation is to "bring about an agreement between two arguers based on the conjoining of their positions in as many ways as possible" (Gilbert, 1997, p. 70). The aim of arguing is coalescence, which is the "locating of shared values, beliefs and goals so that you can try to merge your interests with those of your partner and build on basic agreements" (Gilbert, 2014, p. 63). Hence, Gilbert's approach is *agreement*-centric, meaning it emphasizes the search for the points of agreement between the arguers instead of having the arguers first and foremost try to alter each other's point of view[9]. Searching for points of agreements can take a lot of time and repeated interactions, and it involves uncovering the arguers' goals, values, attitudes, beliefs, or feelings connected to their respective positions with the aim of bringing about as much "coalescence" of their positions as possible. This, of course, presupposes that the arguers do have, and can find, points they have in common, for "if you really can't find any then you are likely wasting your time trying to reach agreement" (Gilbert, 2014, p. 63). We will argue later that this is exactly why multi-modal argumentation is unfit to deal with deep disagreements.

Another crucial part of Gilbert's conception of argumentation is that it happens through combination and interaction of different "means", "systems of messaging", or "modes" (Gilbert, 2022, pp. 489–490). Gilbert proposes a non-exhaustive list of four such modes, namely logical, emotional, visceral, and kisceral.

Logical mode is arguably the most familiar one as it deals with propositions, logical rules, and inferences. In a word, it deals with premise–conclusion complexes as we know them from logic textbooks. This mode is displayed in Tobias' insistence that Almut is in the childbearing age and Almut's retortion that she is only thirty-four. *Emotional* mode involves not only emotional appeals to the audience but also marshaling of emotions as reasons in themselves. For instance, when Almut says to Tobias that "there's this little bit of me that thinks 'Fuck you' for even asking", she is pointing out her emotion to communicate to Tobias that he had offended her by pushing the matter (see Gilbert, 2004). *Visceral* mode amounts to non-verbal communication such as one's (lack of) eye contact, sights, silent pauses, etc. An example here would be Almut's raise of hands, palms open, as if to indicate to Tobias to back off when he starts making remarks about her age.

The signal that Tobias is supposed to get from Almut's action is that he should give her space and stop pushing the matter. Note that the hands are raised *in addition* to Almut's proclamation to "Back the fuck off", making the signal both verbal and non-verbal. This is in line with Gilbert's contention that we rarely argue only through one mode. Instead, our arguments are layered complexes of different overlapping and interacting modes. For instance, what Almut did was display, both verbally (logical mode) and non-verbally (visceral mode), her anger (emotional mode) at the perceived offence made by Tobias, likely hoping that he will take that as a reason to back off (logical mode) (cf. Gilbert, 1997, p. 80). Alternatively, she could have leaned into one mode more than the others. For example, she could have simply leave the room (visceral mode), cuss out Tobias (emotional mode), or proclaim "I am still young, therefore let us postpone this conversation until later time" (logical mode). Most of the time, however, our everyday arguments happen at the intersection of these different modes.

Lastly, *kisceral* mode is concerned with arguments that draw from our everyday intuitions, hunches, gut feelings, experiences having to do with the imaginative, spiritual, or otherwise mystical. Gilbert's example is a person refusing to buy a house because they have a "creepy feeling about it" (Gilbert, 1997, p. 87). We think that kisceral mode is also displayed by Tobias when he tries to make up with Almut after their initial conflict. Some weeks after the conflict, Tobias visits Almut again. After being invited in by Almut's friends, who are having a baby shower party, Almut enters a room and notices Tobias. Apologizing for the interruption, Tobias proceeds to explain that he saw Almut last week while passing by her restaurant. He then continues, hesitantly, that "it made me realize, well, two things. First of which, I was still quite angry with you because although I might have been somewhat insensitive, you were rude to me, which, yeah, a lot, hurt. And the second thing, I was guilty of focusing on the wrong, ehm," Tobias obviously struggles to find the right words, "thing, aspect. Looking ahead instead of right, [pause] in front of me, at you." The shot lingers on Almut, who after a moment smiles ever so slightly.

What just happened? Tobias explains that *seeing* Almut made him *realize* that he was focusing on the wrong thing. Taken together with his hesitancy and loss for words, we think that what Tobias is describing here is an experience of "insight" (note that he does not say that seeing her had "changed his mind"), which is often defined as a getting a sudden apprehension of a situation intuitively. Importantly, it is usually tricky to locate what had caused the insight, hence Tobias' troubles explaining himself to Almut. This is also why conveying one's insight to another exemplifies kisceral mode of argumentation (cf. Tindale, 2022).

To repeat, our aim is not to claim that multi-modal theory is superior to others. But we chose it as our main interlocutor here for its endeavor to not shy away from the messiness of real life, where arguments take place between "complex entities with a range of desires, needs and goals" (Gilbert, 1997, p. 67). We believe it is for this reason why, as just demonstrated, it captures what is happening between Tobias and Almut so well. Furthermore, it also provides them with practical advice: bring into awareness each other's feelings, needs, and values, try to find points of agreement, and see where to go from

[8] It would be more precise to talk of multi-modal argumentation on the one hand, and coalescent argumentation on the other, with the former serving a descriptive role, whereas the latter a prescriptive one. Gilbert himself asserts, however, that "Coalescent Argumentation grew out of multi-modal argumentation" (Gilbert and Carozza, 2024, p. 4), so we will for convenience use "multi-modal" to refer to both parts.

[9] For the further discussion on differences between agreement- and disagreement-centric views see (Aikin and Casey, 2022; Kiš, 2025b).

there. But it is exactly this point of coalescence which seems most problematic in the context of disagreement that is deep. For if Tobias and Almut's disagreement is deep, then even a theory as promising as multi-modal argumentation is unlikely to help our couple reach agreement. We illuminate this limit of multi-modal argumentation in the next section[10].

5. The limits of multi-modal argumentation in deep disagreements

As we see it, multi-modal argumentation is a powerful tool when it comes to resolving disagreements. Nevertheless, we shall argue that it has significant limits when it comes to resolving disagreements that are deep. To show both its strengths and limits, we are going to draw on qualitative sociological research on couples' disagreements on childbearing[11]. The reason behind this choice is as follows. As stated above, the movie does not depict what happens between Tobias and Almut's initial conflict and its resolution. It would be natural for us to simply *imagine* what has happened *given* their disagreement is deep and draw our conclusions from that. However, we wish to refrain from that strategy in order to accommodate an increasingly loud criticism, according to which this way of theorizing deep disagreements is *question-begging* because it tries to mold reality so that it fits our concepts instead of the other way around (Kiš, 2023, e.g., 2025a; Manhire and Kronqvist, 2025; McGlynn, 2023; Popa, 2022). Hence, we opt for different strategy. Namely, we will explore the advantages and disadvantages of multi-modal argumentation in *real-life* couples' disagreements on procreation. Inspired by that, we return to Tobias and Almut and ask why multi-modal argumentation alone was unable to help them. The explanation we offer is that theirs is a deep disagreement and in such a disagreement there are no points of coalescence which are required by multi-modal argumentation. We then ask: if their disagreement was deep, how come they eventually agreed to conceive? To understand that, we shall claim, we can draw on the enactive tool of participatory sense-making.

That said, the research on reproductive choice-making is inherently idiosyncratic – every couple's situation, values, desires, and plans are different[12]. We grant, then, that the story we are about to tell hinges to a certain extent on the particular case studies we have chosen. Let us start with the strengths of multi-modal argumentation as exemplified in the case of Jake and Marie (Bhambhani and Inbanathan, 2020).

As the authors of the study describe them, Jake and Marie entered their relationship with "the internalized normative presumption of becoming parents someday" (Bhambhani and Inbanathan, 2020, p. 354). The partners *unreflectively* expected that when the appropriate moment comes, they will have children. But with time Jake realized that he is just stalling, thinking that "maybe I am not just interested in having kids" (Bhambhani and Inbanathan, 2020, p. 354). Jake did not share his discovery of himself with Marie at first, fearing that she might want to leave him. But when guilt overcame him and he did open up, Marie took "6 months to 1 year to deal with it," explaining that "I had all this social pressure on me and people telling me, 'oh well, you might want some [kids] eventually' and that's when all the irritation started and I didn't know what I wanted" (Bhambhani and Inbanathan, 2020, p. 354). Marie then started a therapy where she discovered about herself that she in fact shares Jake's view on procreation. Marie narrates: "every time [during therapy sessions] the same thing was [sic] coming up and I would feel like I really don't think I want children; I don't feel the need to have it; and my lifestyle choice doesn't [sic] fit well with children either" (Bhambhani and Inbanathan, 2020, p. 355).

So, Jake and Marie initially disagreed on whether to have children but were eventually able to reach agreement. Notice, furthermore, that the disagreement was overcome with something like self-discovery. This is particularly evident with Marie, who, through therapy, has realized that her desire to have children is not genuinely her own but rather something imposed on her by societal norms. In Bhambhani and Inbanathan's (2020, p. 355, emphasis ours) summary: "Despite an earlier predilection toward parenthood, both had to embark on a *disquieting* journey to overcome the normative expectation of becoming parents someday." For these reasons, we think that Jake and Marie's case exemplifies multi-modal argumentation at its best, the goal of which is to coalesce on an *existing* ground by uncovering each other's values, needs, etc.

Now, it could be argued that Tobias and Almut's case is alike and that the reason they ultimately agreed to have a child also amounted to self-discovery. For instance, when Almut first faced her diagnosis and the pregnancy-inhibiting treatment associated with it, this materialized for her the picture in which she and Tobias remain child-free. Seeing the picture more vividly now, she did not like it, hence deciding the treatment that allows her to get pregnant eventually. On the face of it, this reading seems perfectly plausible.

Note, however, that Jake and Marie's disagreement does not seem to be deep. Not because it was eventually resolved – most definitions of deep disagreement allow for its resolution (where the definitions differ is in whether the resolution can happen via rational means or not, see footnote 4). We do not think Jake and Marie's disagreement is deep because, from the little we know about them, it does not seem like they genuinely disagreed – which is one of the desideratum of deep disagreement mentioned in Sec. 3. In other words, it does not seem like their axiological hinge commitments regarding procreation differ that much, as evidenced by neither of them reporting that having children is existentially important for them upon closer reflection. This makes their case unlike that of Tobias and Almut's, whose disagreement, we argued in Sec. 3,

[10] For a different kind of criticism of multi-modal argumentation, see, e.g (Maldonado, 2025).

[11] Most of this kind of research focuses on heterosexual couples. Less attention is given to homosexual couples and still less to other arrangements (cf. Blackstone and Stewart, 2012).

[12] Some trends do emerge, however, see (Blackstone and Stewart, 2012; Matthews and Desjardins, 2017) for review.

is deep. In sum, multi-modal argumentation was successful in this disagreement, and this disagreement does not appear to be deep. But compare next the case of Rachel and Dan (Yu et al., 2023).

Rachel and Dan are a married couple disagreeing on whether to have a third[13] child. As described by Yu et al., Rachel expressed a "strong desire" of having another child, a girl in particular – the other two were boys, one diagnosed with autism – because she had *always envisioned* a family of five. Dan, on the other hand, was "very firm" about not wanting a third child because of financial stress, the risk of repeated autism diagnosis, and the possibility of Rachel giving birth to another boy, which he believed would again raise the dilemma about another child. Authors of the study note that the couple's disagreement was so intense that it was "impossible for the couple to even begin a civil conversation about the sensitive topic before they entered therapy" (Yu et al., 2023, p. 55). All of this, we believe, warrants a suspicion that Rachel and Dan are dealing with deep disagreement. Recall from Sec. 3 the four desiderata for disagreement to count as deep, including genuineness of disagreement (1), the fact that it involves reason-giving (2), that it is systematic (3), and persistent (4). We think Rachel and Dan's disagreement clearly exemplifies (1), (2), and (4). What about systematicity (3), or the fact that disagreement involves an array of interconnected propositions? The study lacks on detail in that regard, so we have to deduce the answer from the available description.

We think that Rachel and Dan's disagreement does also exemplify (3). The reason is that if Rachel disagrees with Dan's stance regarding the third child, she arguably also disagrees with, or at least does not accept, the claims he offers as reasons for his stance. Namely, she also likely discounts his worry that it will cause (a) financial stress, and she rejects that the risk of (b) giving birth to another boy who (c) might be diagnosed with autism should speak against the decision to have another child. Likewise, Dan – in virtue of disagreeing with Rachel – also likely does not accept the weight of the reasons she provides in support of her position, which is that she (d) wants a girl and that she had (e) always pictured having a family of five. Here, then, we have at least 5 contested propositions different from but connected to the one on whether to have another child. Hence, we think that the case embodies also systematicity (3), making it therefore a likely case of a deep disagreement. This makes Rachel and Dan's case unlike that of Jake and Marie, and like that of Tobias and Almut. Next, we show that multi-modal argumentation is insufficient in this case.

How did Rachel and Dan respond to their deep disagreement? They entered a therapy, particularly a *narrative couple therapy* – this detail will be important later. There, they first worked with the help of the counselor on their communication skills and on bringing to light how their respective backgrounds (i.e., Dan has only a younger brother, whereas Rachel has two older brothers and a nephew on autism spectrum) might have influenced their position. After that, they shifted their focus on their disagreement about having another child. The counselor invited Rachel and Dan to write letters to their current selves from the perspective of their future selves. They were asked to write these letters under the assumption that their current desires had not been fulfilled. So Rachel wrote a letter reflecting on how her life might look in 10 years if she chose not to have the third child, while Dan wrote his letter imagining what life would be like if they had decided to have the third child (Yu et al., 2023, pp. 55–56).

In the next session, the couple read the letters to each other and processed it with the help of the counselor. The upshot was "deepened understanding of each other's feelings and thoughts" (Yu et al., 2023, p. 56). This is the prime example of arguers' attempts to unearth the details behind their respective positions advocated by multi-modal argumentation. We have also seen something similar play out in the previous case study, particularly in the case of Marie. For the next session, the couple was to undergo the same exercise but writing under the assumption that their respective desires were fulfilled. For Rachel, as described by the authors of the study, this exercise "brought clarity and new insights for her on what she valued the most for a family" (Yu et al., 2023, p. 57). Significantly, Dan did not complete the assignment, explaining in the end that he "could not bear to be the reason for his wife not to be happy" (Yu et al., 2023, p. 57). Dan's thinking has shifted and he eventually decided to have the third child.

So, what happened? We think that a part of Rachel and Dan's process of resolving their disagreement doubtlessly consisted in following the advice of multi-modal argumentation in that they tried to understand each other better and see where their needs overlap. As Dan explained, this exercise had "increased his empathetic understanding towards Rachel's grief for not having a daughter" (Yu et al., 2023, p. 56). But was that all it took for the disagreement to dissipate? If that were so, we would have to conclude that either multi-modal argumentation helped resolved deep disagreement here, or that Rachel and Dan's disagreement was not actually deep. We showed above that it most likely is deep – does that mean multi-modal argumentation can help us resolve deep disagreements? To answer that question, let us zoom in on the letter-writing exercise undertaken by the couple. This exercise, as the authors describe it, aimed at the couple's reimagining and understanding of each other's "story from a *new* perspective and thus subsequently creating more meaningful and affirming stories" (Yu et al., 2023, p. 53, emphasis ours). Furthermore, the exercise was designed so that the couple can integrate these new narratives into their current ones, allowing them to create a shared "positive *new* story *in the future*" (Yu et al., 2023, p. 54, emphasis ours).

[13] Evidence suggests that the nature of couples' decision-making processes differ in cases of first vs. subsequent children (Ajzen and Klobas, 2013). Given that Tobias and Almut's decision revolves around having the first child, this might complicate comparing them to Rachel and Dan. Nevertheless, we believe that the most important lesson – i.e. that multi-modal argumentation alone was insufficient in this case – of the comparison does not hinge on this.

Notice our emphases. What we are getting at here is that the other part of what allowed Rachel and Dan to overcome their deep disagreement was *creating new narratives* together in addition to gaining a better understanding of an already existing ones. In other words, something more than multi-modal argumentation took place here. This is the gist of the narrative couple therapy: it "can be used to expand experiences and possibilities through the reconstruction and retelling and rehearing of *new stories*" and to "assist the couple to look differently at their current impasse and create opportunities for *new* storytelling" (Yu et al., 2023, pp. 54–55, emphasis ours). Dan, unlike Marie, did not just discover what he already but unconsciously wanted – he got to a new perspective about the future, himself, his wife, and their shared life. And why would a couple that is committed to a future together need to create new narratives about themselves in order to overcome their deep disagreement if not precisely for the fact that the current narrative is insufficient to that end and, still, they are committed to a future together? This is why multi-modal argumentation alone is insufficient for Rachel and Dan – it is a good tool for bringing to light couple's values, goals, needs, etc., and see where they meet or coalesce. But what if there are no such points that overlap? What if the disagreement is so vast – or *deep* – that there simply are no points of coalescence?

For Gilbert, in cases like that "you are likely wasting your time trying to reach agreement" (Gilbert, 2014, p. 63). Giving up is therefore certainly one possible response. It was not a response of Dan and Rachel who want to remain partners, however. Instead, their response was to engage in *narrative couples therapy*, wherein the couple does not only work with what there already is but also tries to *create* shared meanings and novel understanding about oneself, the other, and the relationship – which is what allows them to overcome their deep disagreement and share a future together.

Could our couple perhaps use their mutual commitment to a shared future as a point of coalescence?[14] We do not think so, for the kind of sharedness in question here – the kind that would allow multi-modal argumentation to get off the ground – concerns participatory sense-making, i.e., taking part in a new perspective on the future. This sharedness consists in a joint commitment to a possible future together. As we will see in a moment by digging deeper into the enactive approach to linguistic bodies and co-becoming, this is precisely what participatory sense-making points to. For now, we believe that the case of Rachel and Dan shows how we have to go *beyond* the already existing attitudes, needs, and values in order to overcome deep disagreement[15]. Why? Because in cases of disagreements that are deep, there is very little overlap between the original attitudes, needs, etc. What is needed instead is joining efforts and creating *new* meanings so as to allow the continuation of a shared life[16]. This is the core of our worry about multi-modal argumentation: *it fails in situations where differences in the arguers' positions are too radical, such as in cases of deep disagreement*[17]. It is also why we think it is in cases like that of Dan and Rachel more precise to talk not about "overcoming" or "resolving" a disagreement, both of which emphasize rational deliberation, but "transforming" disagreement into new meanings – a distinction that will become clearer momentarily.

Regarding the success of multi-modal argumentation in deep disagreements, we think that Tobias and Almut's disagreement from *We Live in Time* is akin to the one between Rachel and Dan – both couples overcame their deep disagreement but not only by relying on multi-modal argumentation. This means that to gain a better understanding of what happened between Tobias and Almut, more than multi-modal argumentation is needed. Namely, if dealing with deep disagreements requires not just understanding but also a future oriented co-creation of meaning, as the case of Rachel and Dan attests, then we need a framework that accounts for how new meanings emerge in social interaction. This is where *participatory sense-making* comes to the rescue[18]. In the next two sections, we shall utilize it in explaining how Tobias and Almut overcame their deep disagreement.

6. The enactive approach and participatory sense-making

The enactive approach to language reframes language as a living, embodied, and dialogical activity – a mode of participatory sense-making (Di Paolo et al., 2018). Participatory sense-making is the enactive model of social understanding

[14] We thank the anonymous reviewer for raising this question.

[15] For a similar view in regards to overcoming deep disagreements, see (Cartlidge, 2022).

[16] Some might object that a simpler interpretation of Dan and Rachel's case is that Dan conceded to Rachel's demand because he was, say, persuaded by the rhetorical appeal in her letter. This reading implies that either multi-modal argumentation was sufficient in overcoming their deep disagreement, or their disagreement was never actually deep. We would contest such reading for a number of reasons, however. First, author's description of the couple's initial inability to converse about the question of having another child in a collected manner closely resembles typical cases of deep disagreement (e.g. vaccination, abortion, Israel–Palestine conflict). Second, the couple's difficulty was not merely cognitive but affectively and ethically loaded – Dan's resistance and Rachel's longing stemmed from divergent lived commitments, not just differing beliefs. This resembles Duncan Pritchard's concept of deep disagreement as disagreement concerning issues of existential importance. Third, the eventual shift emerged only after a carefully guided imaginative exercise that invited each partner to inhabit the other's perspective and envision emotionally resonant futures, pointing to a transformation rooted in relational engagement rather than discursive resolution. Fourth, Dan's extended difficulty in composing his second letter, and his eventual admission that he could not bear being the source of Rachel's unhappiness, suggests that the change in his stance was not the result of being persuaded in the usual sense of changing his (non-)doxastic attitude, but rather of his inability to continue relating to his wife in a certain way – namely, as the reason for her unhappiness – a mode of relating he could no longer sustain in light of the shared emotional labor they had undertaken.

[17] Michael Gilbert admitted as much to us in personal Correspondence. See also (Gilbert, 2014, p. 61).

[18] Participatory sense-making has been recently employed for analyzing and discussing storytelling and other narrative and embodied methodologies in psychotherapy. See (García et al., 2022; Popova, 2019).

(De Jaegher and Di Paolo, 2007). In line with the embodied mind approach (Varela et al., 1991), it takes meanings as emerging out of relational and embodied activity. Meaning is understood in its existential relevance: it is the felt perspective of a living body in creating and maintaining itself in relation to other bodies and the environment they inhabit. That is why sense-making is participatory from the outset. It is not that there is an individual process of sense-making that can be eventually shared. Participating in each other's processes of sense-making is constitutive of sense-making – also in making sense of oneself. This is relevant to the debate on social cognition but it also makes explicit the biological roots of the enactive approach and its ethical motivation. Participatory sense-making is a felt perspective towards oneself, the others and the inhabited world motivated by existential concerns and values that constitute a life that is worth living (Candiotto, 2022, 2025; Colombetti, 2013; Colombetti and Torrance, 2009; De Jaegher et al., 2010; Weber, 2017).

Although there are different dimensions of participatory sense-making, some of them applied to living beings in general and not to humans only, we here focus on the kind of participatory sense-making that pertains to linguistic bodies. By "linguistic bodies", Ezequiel Di Paolo, Elena Cuffari and Hanne De Jaegher (2018) mean embodied agents characterized by a specific form of autonomy emerging from recursively structured social interactions, particularly dialogues. Linguistic bodies enact sense-making through dialogical practices involving mutual recognition, reciprocal role-taking, and participatory negotiation of meaning. At least two interrelated processes shape and continually transform linguistic bodies: (1) The assimilation of socially produced utterances, meanings, norms, and expressive practices into one's embodied repertoire ("Incorporation"); (2) The embodiment and enactment of voices, perspectives, intentions, and social roles from others within the agent's own interactions ("Incarnation").

This dual process highlights a fundamental dialectical tension: linguistic bodies continually seek coherence in their identity and actions while inevitably embodying contradictions arising from multiple social voices, influences, demands that come from their partners or the situation they are in. As such, linguistic bodies are inherently unfinished and open[19]. This leads to the theory of *becoming* that plays a crucial role in explaining the development of personal identities through participatory sense-making. The core idea around "enactive becoming" as presented by Ezequiel Di Paolo (2021) is that humans do not merely exist as predefined biological beings, but rather, they continually and actively become through their interactions with their environment and community.

In effect, humans make sense of themselves, the others and the world they live in by engaging in social interactions and sharing life with other beings. In this way, we humans become who we are, but not in a fixed manner. Autonomous personal identity is seen as shaped and continuously transformed by significant relationships. In knowing-in-connection, a kind of participatory sense-making where one's normativity shapes the perspective of the other, and vice versa (De Jaegher 2021, Figueiredo et al., 2025), the values and commitments of the person with whom one is in a relationship come into the spotlight. In this case, the commitment toward new existential meanings gets momentum especially because it is in relation to and about the significant other. And the new meanings created have consequences for the relationship, for better or worse (Miranda de Figueiredo et al., 2025). The dialectical tension that is inherent to participatory sense-making and realized in processes of becoming is even more crucial for this type of participatory sense-making, for it is there – in co-becoming – that new meanings can emerge out of disagreement. Let us apply this discussion to Tobias and Almut.

We saw, for instance, that there is a tension in Tobias in wanting both a child and to be with Almut. Almut, on the other hand, wants to keep her career but, at the same time, must keep undergoing treatment of ovarian cancer. These tensions do not operate only "internally" but they shape and run through Tobias and Almut' interactions. These interactions are part of a *shared form of life* in which the two members of the couple, although maintaining their autonomy, are making sense of themselves, the other, their relationship, and their future by living together (Kyselo and Tschacher, 2014).

The new meanings – in our case, becoming parents *together* – emerge exactly out of this shared form of life and the commitment to the continuation of this shared form of life. Note, however, that struggle and conflict remain a necessary part of such a form of life. This is due to fact that in a shared form of life, although the barriers are dissolved between the two linguistic bodies, this does not imply that the difference between them is erased too (Di Paolo, 2022). Difference is a key concept in participatory sense-making and is at the source of the emergence of new meanings. It is not that Tobias and Almut need to find an "agreement", as in thinking the same, or one simply accepting the position of the other. This is what happened to Jake and Marie, but it is not a "new" meaning. The novelty springs forth from difference, and difference is tensional.

From an enactive perspective, difference is not a problem to be solved or erased, but a condition for transformation: it is generative. It is this tension in the disagreement that discloses the disagreement's potentiality to allow for a mutual transformation between interacting agents. Note that this should not be read as apologetics for disagreements. Disagreements – especially deep ones – can be destructive (de Ridder, 2021). Still, as we will see in a moment, on the enactive view, disagreements are not necessarily failures, but can also serve as openings for something new. These tensions often signal a transformation-in-progress – an opportunity to reconfigure norms, reshape relations, and bring forth new forms of social understanding. This is done in participatory sense-making in which *difference amounts to participation* (Di Paolo and De Jaegher, 2022).

[19] This aligns with the biological roots of enaction: organisms are precarious beings striving for life, i.e., they are in a constant effort of ongoing maintenance by facing disintegration. See (Beer and Di Paolo, 2023).

Finally, we need to elucidate the role of embodiment here. The enactive notion of embodiment is broader than the multimodal one. Under enactive framework, embodiment does not simply point to the fact that the interlocutors interact through mutual body coordination — e.g., by adjusting postures, rhythms, and gestures based on their mutual dynamics. This basic level of participatory sense-making is there, sure. But interlocutors' sense-making goes beyond that because it also reflects their existential concerns and issues. These are understood from the first-person perspective of the living body, its primordial affectivity (Colombetti, 2013) and feeling to be alive (Weber, 2019). As for enactive becoming, living beings are in a continuous striving for balance-coherence in meeting challenging situations. This point is crucial to understand how Almut has changed her perspective towards pregnancy by living with Tobias and experiencing ovarian cancer. Uncertainty about the future and crisis come with processes of ongoing becoming that are made especially salient due to her sickness. But they are salient also in processes of giving life — notably, these two dimensions are deeply entangled in Almut's case.

Drawing again on empirical research, we can illustrate this point in couples described by Cuffari et al. (2022). There, the authors conduct interviews with expecting or recent parents and notice that parents' often express feelings of uncertainty as they prepare for new life. Based on the interviews, Cuffari et al. (2022) point out that uncertainty about life is an intrinsic part of future-oriented attitudes. This does not mean, however, that we have no say at all in how the future plays out. The future can be positively envisioned — as in *choosing* the pregnancy. But such a choice requires an openness to uncertainty (instead of a closure to it, as in fear) that positively resists fatalism about the future. So, Almut's openness to the possibility of having a child with Tobias emerges not as a mere reaction to the crisis but as *enacting a future*.

Openness to processes of *co-becoming* is the key moment here. Becoming is a condition of life: life operates via unceasing adaptive regulations in the face of uncertainty and as a result of the tensions in participatory sense-making. Sense-making is not just Almut's. But it is Almut with Tobias and their relationship. Choosing parenthood is not necessarily a matter of rational deliberation. Tobias did not try to rationally persuade Almut. Actually, his listening attitude and acknowledgement of Almut's needs in letting her be (De Jaegher, 2021) contributed a lot to the emergence of a new meaning. Participatory sense-making is an expression of their openness to uncertainty. This openness is driven by aspirations, on how Almut and Tobias see their future (co)becoming and, at the same time, the risk of the loss of a shared future they aim for and desire. Such openness is never guaranteed nor does it happen by mere chance, however. Sometimes, interventions for cultivating this know-how and enacting a future are needed, as seen in the cases from Sec. 5.

There, one or both partners chose to go to therapy, hoping it would help them solve their problems around the pregnancy choice. And this certainly helped. Now there surely are many other intervention strategies that couples can pursue in order to cope with such problems and shape how their life unfolds. But the point here is that for the enactive approach, a *choice out of rational deliberation* is not all that matters for existential transformation. Something more basic is at work in participatory sense-making and in support of ethical know-how.

This element has been named differently, such as the already mentioned "primordial affectivity" (Colombetti, 2013), "desire to give life" (Weber, 2016), "love" (Candiotto, 2024; Candiotto and De Jaegher, 2021; De Jaegher, 2021), and "hope" (Cuffari et al., 2022). We cannot explore this line of thought here, but the main idea is that embodied care and affective concern regulate the eventual choice, as it is explicit in Dan's case, since he could not imagine a future in which his beloved wife was unhappy. His love for her shaped the way he was writing the letter from the perspective of his future self. So, what matters for a positive transformation is attending these existential conditions, such as the love for his wife and the hope for a shared future, with care. In other words, the enactive perspective highlights the process of nurturing the existential conditions for participatory sense-making that very often have to do with an ethics of sense-making (Di Paolo and De Jaegher, 2022; Varela, 1999; Weichold and Candiotto, 2023).

Coming back to our case: choosing to have a baby means accepting to bring a little human being into a state of open becoming, which process is full of uncertainties. As such, this choice entails the active acceptance of the unfinishedness of both human existence and the world, with all the risks and vulnerabilities involved. At the same time, a commitment to nurturing conditions that allow the baby to thrive is there. Thus, the fact that the choices we make are meaningful is not downplayed by the fact that participatory sense-making — which enables these choices — occurs without conscious deliberation. Rather, when it comes to a form of life, we form and sustain it not through processes of deliberate decision-making, but rather it is sustained through our existential concerns.

Although Cuffari et al. (2022) discuss real-life cases in which pregnancy is already ongoing, we think that the enactive approach to hope in welcoming one's baby is helpful for thinking about our case too. The reason for this detour to Cuffari et al. is that it shows us that the transformation that can take place out of the dialectical tensions in participatory sense-making is also imbued with an affective attitude towards the future. And life's uncertainty makes transformation a possibility as opposed to a dialectical necessity in the Hegelian sense for which a synthesis necessarily follows from the negation of a thesis[20]. But it is precisely there — in the uncertainty — that sense-making assumes an existential relevance. New meanings emerge as a perspective about the future, in endorsing active engagement in the processes of becoming. And this might become even more salient when life is put at risk, as in Almut's case. Therefore, Almut's commitment towards the continuation of life exemplified both literally and figuratively in her choice to treat her cancer and have a child with Tobias

[20] Still, dialectics is at the core of the enactive approach. But this does not imply that disagreements and contradictions are quickly resolved in a deterministic manner. The focus is on the dialectical movement out of which new meanings can emerge. See (Di Paolo, 2022; Gambarotto and van Es, 2025).

seems to be the key to the enactive understanding of Almut as a linguistic body *who lives in time* with Tobias. Tobias and Almut's deep disagreement and its transformation should therefore be understood from this fundamental existential structure of participatory sense-making *in addition* to Tobias and Almut's deployment of multi-modal argumentation.

7. Enactive lessons for multi-modal argumentation theory

In the final section, let us look back and draw some lessons for the multi-modal argumentation. We have started by introducing a case study of disagreement on childbearing as depicted in the movie *We Live in Time*. Further, we described the disagreement between the movies' protagonists, Tobias and Almut, to be the case of deep disagreement, or persistent disagreement revolving around topics of existential importance – topics that imbue life with meaning. What is striking about such disagreement is that it is unlikely to be transformed by the marshaling of arguments. We have conceptualized arguments (as a product) and arguing (as a process) along the lines of Michael Gilbert's multi-modal theory of argumentation. Finally, we have identified an important limitation of this theory in regard to deep disagreements. Namely, to come to an agreement, multi-modal theory requires that there be at the very least some common ground (i.e., shared goals, desires, values, etc.) between the interlocutors. With such ground absent – as happens in cases of deep disagreements –, "you are likely wasting your time trying to reach agreement" (Gilbert, 2014, p. 63), to quote Gilbert one more time.

Does this mean multi-modal argumentation is ultimately toothless when it comes to deep disagreements? Our argument does not warrant such a conclusion. We have said in Sec. 3 that arguments do have their role to play in deep disagreements, but that they alone are unlikely to secure eventual resolution of the disagreements that are deep. In a similar vein, we submit that multi-modal argumentation is an essential part of attempts at transforming deep disagreements. We see at least two reasons for this.

First, the thought that arguments are necessary but not sufficient in overcoming deep disagreements is accepted by Duncan Pritchard (see footnote 4), whose concept of deep disagreement we have adopted in this paper, but also by others. For instance, Kathryn Phillips (2021) proposes that arguments are important even in cases of deep disagreements. She adds, however, that before arguments can take roots, the grounds for that need to be prepared. For that to be possible, she continues, we need the argumentative virtue of *patience*. Multi-modal theory resonates well here because it does not take argumentative interactions to be compartmentalized episodes. Rather, it incentivizes repeated interactions that can span months or years.

Second, both Serhij Kiš (2025a) and Neil Levy (2021) also maintain that marshalling of arguments is an unalienable part of overcoming deep disagreements. They add, however, that this marshalling need be tailored to the fact that the disagreement we are dealing with is of a peculiar nature – i.e., deep. But to be able to adjust our arguments to the situation, we in turn need to know that our situation is that of deep disagreement[21]. As Kiš (2025a) proposes, in order to tell whether the disagreement we are in is deep, we could pay attention to our emotions, particularly to the frustration elicited in us by the intractability of that disagreement. Multi-modal theory is fitting here too because it highlights also the non-logical aspects of argumentation, such as emotions. As such, it is well equipped to tackle the job of recognizing the depth of the disagreement.

Apart from these assets, multi-modal theory has at least one important liability as well in regard to deep disagreements. Namely, it works only when there are points of agreement between the interlocutors which wait to be discovered. The problem with this, as we explained, is that structure of deep disagreements is such that no points of "coalescence" are present there[22]. We believe, however, that this drawback of multi-modal theory can be remedied with some enactive tools.

When it comes to the multi-modal theory and the enactive approach, there are already some important overlaps between the two – both are interactionist[23], situated, embodied, and stress the temporality dimension. But they also have one significant difference that we wish to bring attention to. Whereas multi-modal theory operates only with the pool of already existing meanings (i.e., what Gilbert calls "common ground"), enaction goes a step further and highlights the importance of emergence of *new* meanings out of the dialectical tension between the interlocutors. This dialectical tension is at the core of participatory sense-making as experienced by people in a shared form of life. So, new meanings emerge in the relationship, by becoming together, by facing uncertainties and crises and, still, aiming at a possible future. A fundamental trust toward oneself, the other, and the shared life together, is therefore a crucial feature for these new openings. This co-creation of new meanings, such as *being parents together*, is what allowed for the transformationof deep disagreements in cases of Tobias and Almut or Rachel and Dan. This crucial element of the enactive approach to linguistic bodies, we submit, is what improves multi-modal theory.

Now, we wish to address some potential limitations of our study. For one, the emergence of new meanings between linguistic bodies necessitates that they share a form of life together. In simpler terms, it is unlikely that Tobias and Almut

[21] For further discussion, see (Adams, 2005).

[22] It is for this reason that Stina Björkholm (2025) argues that interlocutors might *pretend* that there is such common ground by accepting, but not endorsing, some of each other's commitments. We amend Björkholm's argument by saying that, at least sometimes (e.g., in romantic relationship), the common ground need not be pretended because it can emerge over the duration of a shared form of life via participatory sense-making.

[23] We are not saying that multi-modal theory and participatory sense-making understand "social interactions" in the same way. Actually, we do think that there are significant differences especially because participatory sense-making cannot be reduced to "interactionism" (see Di Paolo and De Jaegher, 2017). However, for the sake of this paper, it is enough to say interaction between arguers/linguistic bodies is an unalienable part of both approaches.

would transform their deep disagreement on whether to (respectively) procreate had they been simply strangers or even friends who do not share a life. What this suggests is that our proposal to enrich multi-modal theory with participatory sense-making is *domain specific*. If we are right, our proposal is of great utility for couples and maybe also small groups navigating deep disagreements. Could our proposal work beyond that, provided we tweak it in necessary ways? Could it work for other paradigmatic cases of political deep disagreements, such as those over vaccination, abortion, or racism? We do not know at this point, but we think that the literature review from footnote 1 suggests an optimistic answer and motivates another promising research avenue, namely, research about joint commitments shared by larger groups of people, potentially in political contexts too – especially while considering existentially charged issues such as the future of humanity, transgenerational responsibility, climate migrants, and the wellbeing of the earth and other species.

Second, is our proposal *content-specific* too? The deep disagreement about *childbearing* has clearly an existential tone and it implies a perspective toward the future. But would our enactive intervention work for less existentially charged disagreements about, say, how to split a restaurant bill? The limitation here concerns the fact that our approach seems to be effective towards deep disagreements, that, following Pritchard, are existentially charged, but not towards more mundane disagreements regarding facts. We grant that this limitation of our account is pertinent, but at the same time think we need not worry much given there are other theories (see Sec. 4) that seem to be well-equipped to deal with these mundane sorts of disagreements.

Lastly, our proposal is not *a one-size-fits-all tool*. There is nothing that would secure a resolution of deep disagreement on procreation even with multi-modal theory enriched with participatory sense-making. This point follows from the very nature of participatory sense-making. For although dialectical tension between the interlocutors *can* give rise to new meanings and the subsequent transformation of disagreement, this transformation is not something we have direct control of. Nevertheless, this should not be taken as a flaw but as a feature of our proposal. Recall the point raised in Sec. 6, where we said that direct control is not the sole mark of agency. In knowing-how to navigate uncertainty, humans can undertake actions and practices that can transform *the context* out of which new meanings can in turn emerge (Candiotto, 2019). The intervention is therefore toward a shared form of life, towards the activities that allow the interlocutors to keep becoming together.

Overall, these three limitations warrant a thought that our proposal is best understood as joining the ranks of what Dale Hample (2021) called *local theories of argument* – we offer a theory of transforming deep disagreement into new meanings that is particular to time, space, persons, and their relationship. The focus on the existential significance of participatory sense-making, especially about affective concerns and commitment, aligns with the situated affectivity research program (Stephan and Walter, 2020; von Maur, 2021) and contribute to the developments of the enactive approach to linguistic bodies. Finally, it shows the relevance of Pritchard's understanding of deep disagreements (especially Pritchard, 2025b) for the contemporary debate in epistemology of disagreement and it opens up new paths for exploring their existential grounds.

We hope to have shown that bridging enaction and argumentation theory is a fruitful research endeavor. As far as we know, there have been very few attempts at developing this strand of research. We hope it will gain more traction and that the strands we have left hanging will be addressed in future research, with enaction hopefully being brought into pragma-dialectical or virtue-oriented argumentation theories as well.

CRediT authorship contribution statement

Laura Candiotto: Writing – review & editing, Writing – original draft. **Serhij Kiš:** Writing – review & editing, Writing – original draft.

Declaration of interest statement

Authors declare no conflicts of interest.

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Data availability

No data was used for the research described in the article.

References

Aberdein, A., Cohen, D.H., 2016. Introduction: virtues and arguments. Topoi 35, 339–343. https://doi.org/10.1007/s11245-016-9366-3.

Adams, D.M., 2005. Knowing when disagreements are deep. Informal Log. 25. https://doi.org/10.22329/il.v25i1.1045.

Aikin, S.F., Casey, J., 2022. Argumentation and the problem of agreement. Synthese 200, 134. https://doi.org/10.1007/s11229-022-03680-4.

Ajzen, I., Klobas, J., 2013. Fertility intentions: an approach based on the theory of planned behavior. Demogr. Res. 29, 203–232. https://doi.org/10.4054/DemRes.2013.29.8.

Beer, R.D., Di Paolo, E.A., 2023. The theoretical foundations of enaction: precariousness. Biosystems 223, 104823. https://doi.org/10.1016/j.biosystems.2022.104823.

Benatar, D., 2008. Better Never to have been: The Harm of Coming into Existence. Oxford University Press.

Beran, O., 2022. Who should have children? (Us?) when should we have children? (Now?). SATS 23, 55–74. https://doi.org/10.1515/sats-2022-0004.

Bhambhani, C., Inbanathan, A., 2020. Examining a non-conformist choice: the decision-making process toward being childfree couples. Int. J. Sociol. 50, 339–368. https://doi.org/10.1080/00207659.2020.1797265.

Bhattacharjee, N.V., Schumacher, A.E., Aali, A., Abate, Y.H., Abbasgholizadeh, R., Abbasian, M., Abbasi-Kangevari, M., Abbastabar, H., ElHafeez, S.A., Abd-Elsalam, S., Abdollahi, M., Abdollahifar, M.-A., Abdoun, M., Abdullahi, A., Abebe, M., Abebe, S.S., Abiodun, O., Abolhassani, H., Abolmaali, M., Abouzid, M., Aboye, G.B., Abreu, L.G., Abrha, W.A., Abrigo, M.R.M., Abtahi, D., Abualruz, H., Abubakar, B., Abu-Gharbieh, E., Abu-Rmeileh, N.M., Adal, T.G.G., Adane, M.M., Adeagbo, O.A.A., Adedoyin, R.A., Adekanmbi, V., Aden, B., Adepoju, A.V., Adetokunboh, O.O., Adetunji, J.B., Adeyinka, D.A., Adeyomoye, O.I., Adnani, Q.E.S., Adra, S., Afolabi, R.F., Afyouni, S., Afzal, M.S., Afzal, S., Aghamiri, S., Agodi, A., Agyemang-Duah, W., Ahinkorah, B.O., Ahlstrom, A.J., Ahmad, A., Ahmad, D., Ahmad, F., Ahmad, M.M., Ahmad, S., Ahmad, T., Ahmed, Ali, Ahmed, Ayman, Ahmed, H., Ahmed, L.A., Ahmed, M.S., Ahmed, S.A., Ajami, M., Aji, B., Akalu, G.T., Akbarialiabad, H., Akinyemi, R.O., Akkaif, M.A., Akkala, S., Hamad, H.A., Hasan, S.M.A., Qadire, M.A., Al-Ahdal, T.M.A., Alalalmeh, S.O., Alalwan, T.A., Al-Aly, Z., Alam, K., Al-amer, R.M., Alanezi, F.M., Alanzi, T.M., Albakri, A., Albashtawy, M., AlBatineh, M.T., Alemi, H., Alemi, S., Alemu, Y.M., Al-Eyadhy, A., Al-Gheethi, A.A.S., Alhabib, K.F., Alhajri, N., Alhalaiqa, F.A.N., Alhassan, R.K., Ali, A., Ali, B.A., Ali, L., Ali, M.U., Ali, R., Ali, S.S.S., Alif, S.M., Aligol, M., Alijanzadeh, M., Aljasir, M.A.M., Aljunid, S.M., Al-Marwani, S., Almazan, J.U., Al-Mekhlafi, H.M., Almidani, O., Alomari, M.A., Al-Omari, B., Alqahtani, J.S., Alqutaibi, A.Y., Al-Raddadi, R.M., Al-Sabah, S.K., Altaf, A., Al-Tawfiq, J.A., Altirkawi, K.A., Aluh, D.O., Alvi, F.J., Alvis-Guzman, N., Alwafi, H., Al-Worafi, Y.M., Aly, H., Aly, S., Alzoubi, K.H., Ameyaw, E.K., Amin, T.T., Amindarolzarbi, A., Amini-Rarani, M., Amiri, S., Ampomah, I.G., Amugsi, D.A., Amusa, G.A., Ancuceanu, R., Anderlini, D., Andrade, P.P., Andrei, C.L., Andrei, T., Anil, A., Anil, S., Ansar, A., Ansari-Moghaddam, A., Antony, C.M., Antriyandarti, E., Anvari, S., Anwar, S., Anwer, R., Anyasodor, A.E., Arabloo, J., Bahri, R.A., Arafa, E.A., Arafat, M., Araújo, A.M., Aravkin, A.Y., Aremu, A., Aripov, T., Arkew, M., Armocida, B., Árnlöv, J., Arooj, M., Artamonov, A.A., Arulappan, J., Aruleba, R.T., Arumugam, A., Asadi-Lari, M., Asemi, Z., Asgary, S., Asghariahmadabad, M., Asghari-Jafarabadi, M., Ashemo, M.Y., Ashraf, M., Ashraf, T., Asika, M.O., Athari, S.S., Atout, M.M.W., Atreya, A., Aujayeb, A., Ausloos, M., Avan, A., Aweke, A.M., Ayele, G.M., Ayyoubzadeh, S.M., Azadnajafabad, S., Azevedo, R.M.S., Azzam, A.Y., Badar, M., Badiye, A.D., Baghdadi, S., Bagheri, N., Bagherieh, S., Bahmanziari, N., Bai, R., Baig, A.A., Baker, J.L., Bako, A.T., Bakshi, R.K., Balasubramanian, M., Baltatu, O.C., Bam, K., Banach, M., Bandyopadhyay, S., Banik, B., Banik, P.C., Bansal, H., Baran, M.F., Barchitta, M., Bardhan, M., Bardideh, E., Barker-Collo, S.L., Bärnighausen, T.W., Barone-Adesi, F., Barqawi, H.J., Barrow, A., Barteit, S., Basharat, Z., Bashir, A.I.J., Bashiru, H.A., Basiru, A., Basso, J.D., Basu, S., Batiha, A.-M.M., Batra, K., Baune, B.T., Bayati, M., Begum, T., Behboudi, E., Behnoush, A.H., Beiranvand, M., Ramirez, D.F.B., Bekele, A., Belay, S.A., Belgaumi, U.I., Bell, M.L., Bello, O.O., Beloukas, A., Bensenor, I.M., Berezvai, Z., Berhie, A.Y., Bermudez, A.N.C., Bettencourt, P.J.G., Bhagavathula, A.S., Bhardwaj, N., Bhardwaj, P., Bhardwaj, P.V., Bhaskar, S., Bhat, V., Bhatti, G.K., Bhatti, J.S., Bhatti, M.S., Bhatti, R., Biondi, A., Bisignano, C., Biswas, A., Biswas, R.K., Bitra, V.R., Bjørge, T., Bliss, E., Boachie, M.K., Bobirca, A.V., Bodolica, V., Bodunrin, A.O., Bogale, E.K., Bogale, K.A., Hashemi, M.B., Basara, B.B., Bouaoud, S., Braithwaite, D., Brauer, M., Breitborde, N.J.K., Bryazka, D., Bulamu, N.B., Buonsenso, D., Burkart, K., Burns, R.A., Bustanji, Y., Butt, N.S., Butt, Z.A., Santos, F.L.C. dos, Calina, D., Campos-Nonato, I.R., Cao, F., Cao, S., Capodici, A., Carreras, G., Carugno, A., Castañeda-Orjuela, C.A., Castelpietra, G., Cattaruzza, M.S., Caye, A., Cegolon, L., Cembranel, F., Cerin, E., Chadwick, J., Chahine, Y., Chakraborty, C., Chalek, J., Chan, J.S.K., Charalampous, P., Chattu, V.K., Chaturvedi, S., Chavula, M.P., Chen, A.-T., Chen, H., Chen, S., Chi, G., Chichagi, F., Chien, J.-H., Ching, P.R., Cho, W.C.S., Choi, S., Chong, B., Chopra, H., Choudhari, S.G., Christopher, D.J., Chu, D.-T., Chukwu, I.S., Chung, E., Chung, S.-C., Cindi, Z., Cioffi, I., Ciuffreda, R., Claro, R.M., Coberly, K., Columbus, A., Comfort, H., Conde, J., Criqui, M.H., Cruz-Martins, N., Cuadra-Hernández, S.M., Dadana, S., Dadras, O., Dahiru, T., Dai, Z., Dalton, B., Damiani, G., Darwesh, A.M., Das, J.K., Das, S., Dashti, M., Dastiridou, A., Dávila-Cervantes, C.A., Davletov, K., Debele, A.T., Debopadhaya, S., Delavari, S., Delgado-Enciso, I., Demeke, D., Demessa, B.H., Deng, X., Denova-Gutiérrez, E., Deribe, K., Dervenis, N., Desai, H.D., Desai, R., Devanbu, V.G.C., Dhali, A., Dhama, K., Dhimal, M., Dhulipala, V.R., Silva, D.D. da, Diaz, D., Diaz, M.J., Dima, A., Ding, D.D., Dirac, M.A., Do, T.C., Do, T.H.P., Prado, C.B. do, Dohare, S., Dong, W., D'Oria, M., Santos, W.M. dos, Doshmangir, L., Dowou, R.K., Dsouza, A.C., Dsouza, H.L., Dsouza, V., Dube, J., Duprey, J., Duraes, A.R., Duraisamy, S., Durojaiye, O.C., Dutta, S., Dwyer-Lindgren, L., Dzianach, P.A., Dziedzic, A.M., Ebrahimi, A., Edinur, H.A., Edvardsson, K., Efendi, F., Eikemo, T.A., Ekholuenetale, M., Tantawi, M.E., Elemam, N.M., ElGohary, G.M.T., Elhadi, M., Elilo, L.T., Elmeligy, O.A.A., Elmonem, M.A., Elshaer, M., Elsohaby, I., Zeydi, A.E., Bain, L.E., Eskandarieh, S., Esposito, F., Estep, K., Etaee, F., Fabin, N., Fagbamigbe, A.F., Fahimi, S., Fakhri-Demeshghieh, A., Falzone, L., Faramarzi, A., Faris, M.E.M., Farmer, S., Faro, A., Fasanmi, A.O., Fatehizadeh, A., Fauk, N.K., Fazeli, P., Feigin, V.L., Fereshtehnejad, S.-M., Feroze, A.H., Ferrara, P., Ferreira, N., Fetensa, G., Filip, I., Fischer, F., Flavel, J., Foigt, N.A., Folayan, M.O., Fomenkov, A.A., Foroutan, B., Foschi, M., Fowobaje, K.R., Francis, K.L., Freitas, A., Fukumoto, T., Fuller, J.E., Fux, B., Gaal, P.A., Gadanya, M.A., Gaidhane, A.M., Galali, Y., Gallus, S., Gandhi, A.P., Ganesan, B., Ganiyani, M.A., Garcia-Gordillo, M.A., Garg, N., Gautam, R.K., Gazzelloni, F., Gbadamosi, S.O., Gebregergis, M.W., Gebrehiwot, M., Gebremariam, T.B., Gebremariam, T.B.B., Gebremeskel, T.G., Geda, Y.F., Georgescu, S.R., Gerema, U., Geremew, H., Getachew, M.E., Gething, P.W., Ghasemi, M., Dabaghi, G.G., Ghasemzadeh, A., Ghassemi, F., Ghazy, R.M., Ghimire, S., Gholamian, A., Gholamrezanezhad, A., Ghorbani, M., Ghoshal, A.G., Ghuge, A.D., Gil, A.U., Gill, T.K., Giorgi, M., Girmay, A., Glasbey, J.C., Göbölös, L., Goel, A., Golchin, A., Golechha, M., Goleij, P., Gopalani, S.V., Goudarzi, H., Goulart, A.C., Goyal, A., Graham, S.M., Grivna, M., Guan, S.-Y., Guarducci, G., Gubari, M.I.M., Gudeta, M.D., Guicciardi, S., Gulati, S., Gulisashvili, D., Gunawardane, D.A., Guo, C., Gupta, A.K., Gupta, B., Gupta, M.K., Gupta, M., Gupta, S., Gupta, V.B., Gupta, Vijai Kumar, Gupta, Vivek Kumar, Haakenstad, A., Habibzadeh, F., Hadi, N.R., Haep, N., Hajibeygi, R., Haller, S., Halwani, R., Hamadeh, R.R., Hamdy, N.M., Hameed, S., Hamidi, S., Han, Q., Handal, A.J., Hankey, G.J., Haque, M.N., Haro, J.M., Hasaballah, A.I., Hasan, I., Hasan, M.J., Hasan, S.M.M., Hasani, H., Hasnain, M.S., Hassan, A., Hassan, I., Hassanipour, S., Hassankhani, H., Hay, S.I., Hebert, J.J., Hegazi, O.E., Heidari, M., Helfer, B., Hemmati, M., Herrera-Serna, B.Y., Herteliu, C., Hessami, K., Hezam, K., Hiraike, Y., Hoan, N.Q., Holla, R., Horita, N., Hossain, M.M., Hossain, M.B.H., Hosseinzadeh, H., Hosseinzadeh, M., Hostiuc, M., Hostiuc, S., Hsairi, M., Hsieh, V.C., Hu, C., Huang, J., Huda, M.M., Humayun, A., Hussain, J., Hussein, N.R., Huynh, H.-H., Hwang, B.-F., Ibitoye, S.E., Iftikhar, P.M., Ilesanmi, O.S., Ilic, I.M., Ilic, M.D., Immurana, M., Inbaraj, L.R., Iqbal, A., Islam, M.R., Ismail, N.E., Iso, H., Isola, G., Iwagami, M., Iyer, M., J, L.M., Jaafari, J., Jacob, L., Jadidi-Niaragh, F., Jaggi, K., Jahankhani, K., Jahanmehr, N., Jahrami, H., Jain, A., Jain, N., Jairoun, A.A., Jakovljevic, M., Jamshidi, E., Javadov, S., Javaheri, T., Jayapal, S.K., Jayaram, S., Jee, S.H., Jeganathan, J., Jha, A.K., Jha, R.P., Jiang, H., Jokar, M., Jonas, J.B., Joo, T., Joseph, N., Joshua, C.E., Joukar, F., Jozwiak, J.J., Jürisson, M., K, V., Kaambwa, B., Kabir, Abdulkareem, Kabir, Ali, Kabir, H., Kabir, Z., Kalani, R., Kalankesh, L.R., Kaliyadan, F., Kalra, S., Kamath, R., Kamath, S., Kanchan, T., Kanmiki, E.W., Kanmodi, K.K., S, S.K., Kansal, S.K., Kantar, R.S., Kapoor, N., Karajizadeh, M., Karami, M., Karaye, I.M., Kashoo, F.Z., Kasraei, H., Kassebaum, N.J., Kassel, M.B., Kauppila, J.H., Kazemi, F., Kazeminia, S., Kempen, J.H., Kendal, E.S., Keshtkar, K., Keykhaei, M., Khajuria, H., Khalaji, A., Khalid, N., Khalil, A.A., Khalilian, A., Khamesipour, F., Khan, Ajmal, Khan, Asaduzzaman, Khan, I., Khan, M.N., Khan, M., Khan, M.J., Khan, M.A., Khang, Y.-H., Khanmohammadi, S., Khatab, K., Khavandegar, A., Kashani, H.R.K., Khidri, F.F., Khormali, M., Khosravi, M.A., Khosrowjerdi, M., Kidane, W.T., Kifle, Z.D., Kim, J.S., Kim, M.S., Kimokoti, R.W., Kinzel, K.E., Kiross, G.T., Kisa, A., Kisa, S., Kolahi, A.-A., Kompani, F., Koren, G., Korzh, O., Kosen, S., Laxminarayana, S.L.K., Krishan, K., Krishna, V., Krishnamoorthy, V., Defo, B.K., Kubeisy, C.M., Bicer, B.K., Kuddus, M.A., Kuddus, M., Kuitunen, I., Kulimbet, M., Kumar, H., Kundu, S., Kunle, K.R., Kurmi, O.P., Kusnali, A., Kusuma, D., Kyei, E.F., Kyriopoulos, I., Vecchia, C.L., Lacey, B., Ladan, M.A., Laflamme, L., Lahariya, C., Lai, D.T.C., Lal, D.K., Lalloo, R., Lám, J., Lamnisos, D., Landires, I., Lanfranchi, F., Langguth, B., Laplante-Lévesque, A., Larson, H.J., Larsson, A.O., Lasrado, S., Latief, K., Latifinaibin, K., Le, L.K.D., Le, N.H.H., Le, T.D.T., Ledda, C., Lee, M., Lee, P.H., Lee, S.W., Lee, Y.H., Lema, G.K., Leong, E., Lerango, T.L., Li, A., Li, M.-C., Li, S., Li, W., Li, X., Ligade, V.S., Lim, S.S., Lin, R.-T., Lindstedt, P.A., Listl, S., Liu, G., Liu, J., Liu, Xiaofeng, Liu, Xuefeng, Liu, Y., Llanaj, E., López-Bueno, R., Lopukhov, P.D., Lorenzovici, L., Lotufo, P.A., Lubinda, J., Lucchetti, G., Lugo, A.,

Lunevicius, R., Lv, H., Ma, Z.F., Maass, K.L., Machoy, M., Madureira-Carvalho, Á.M., Razek, M.M.A.E., Maghazachi, A.A., Mahjoub, S., Mahmoud, M.A., Majeed, A., Malagón-Rojas, J.N., Rad, E.M., Malhotra, K., Malik, A.A., Malik, I., Malta, D.C., Mamun, A.A., Manla, Y., Mansoori, Y., Mansour, A., Mansouri, B., Mansouri, Z., Mansournia, M.A., Maravilla, J.C., Marino, M., Marjani, A., Martinez, G., Martinez-Piedra, R., Martins-Melo, F.R., Martorell, M. , Maryam, S., Marzo, R.R., Masoudi, A., Mattumpuram, J., Maude, R.J., Maugeri, A., May, E.A., Mayeli, M., Mazaheri, M., McGrath, J.J., McKee, M., McKowen, A.L.W., McLaughlin, S.A., McPhail, S.M., Mehra, R., Mehrabani-Zeinabad, K., Nasab, E.M., Meto, T.M., Mendez-Lopez, M.A.M., Mendoza, W., Menezes, R.G., Mensah, G.A., Mentis, A.-F.A., Meo, S.A., Merati, M., Meretoja, A., Meretoja, T.J., Mersha, A.M., Mestrovic, T., Metanat, P., Mettananda, K.C. D., Mettananda, S., Mhlanga, A., Mhlanga, L., Mi, T., Miazgowski, T., Micha, G., Michalek, I.M., Miller, T.R., Minh, L.H.N., Mirghafourvand, M., Mirrakhimov, E.M., Mirutse, M.K., Mirza, M., Mirzaei, R., Mishra, A., Misra, S., Mitchell, P.B., Mittal, C., Moazen, B., Mohamed, A.Z., Mohamed, A.I., Mohamed, J., Mohamed, M.F.H., Mohamed, N.S., Mohammad-Alizadeh-Charandabi, S., Mohammadi, S., Mohammadian-Hafshejani, A., Mohammed, M. , Mohammed, Salahuddin, Mohammed, Shafiu, Mokdad, A.H., Mokhtarzadehazar, P., Vardanjani, H.M., Molinaro, S., Monasta, L., Moni, M.A., Moradi, M. , Moradi, Y., Moraga, P., Moreira, R.S., Morovatdar, N., Morrison, S.D., Morze, J., Mosapour, A., Mossialos, E., Motappa, R., Mousavi, P., Khaneghah, A.M., Mpundu-Kaambwa, C., Mubarik, S., Muccioli, L., Mulita, F., Munjal, K., Murillo-Zamora, E., Musa, J., Musaigwa, F., Musina, A.-M., Muthu, S., Muthupandian, S., Muzaffar, M., Myung, W., Nagarajan, A.J., Nagel, G., Naghavi, P., Naik, G.R., Naik, G., Naimzada, M.D., Nainu, F., Nangia, V., Swamy, S.N. , Nascimento, B.R., Nascimento, G.G., Naser, A.Y., Nasiri, M.J., Natto, Z.S., Nauman, J., Naveed, M., Nayak, B.P., Nayak, V.C., Ndejjo, R., Nduaguba, S.O., Negash, H., Negesse, C.T., Negoi, I., Negoi, R.I., Nejadghaderi, S.A., Nejjari, C., Nepal, S., Netsere, H.B., Nguefack-Tsague, G., Ngunjiri, J.W., Nguyen, D.H., Nguyen, H.T.H., Nguyen, P.T., Nguyen, Q.P., Nguyen, V.T., Niazi, R.K., Nigatu, Y.T., Nikolouzakis, T.K., Nikoobar, A., Nikpoor, A.R., Nnaji, C.A., Nnyanzi, L.A., Noman, E.A., Nomura, S., Noreen, M., Noroozi, N., Nri-Ezedi, C.A., Nunemo, M.H., Nuñez-Samudio, V., Nurrika, D., Nutor, J.J., Oancea, B., Obamiro, K.O., Odetokun, I.A., Odogwu, N.M., O'Donnell, M.J., Odukoya, O.O., Oguntade, A.S., Oguta, J.O., Oh, I.-H., Okeke, S.R., Okekunle, A.P., Okonji, O.C., Okwute, P.G. , Olagunju, A.T., Olasupo, O.O., Olatubi, M.I., Oliveira, G.M.M., Olusanya, B.O., Olusanya, J.O., Oluwatunase, G.O., Omar, H.A., Omer, G.L., Onwujekwe, O.E., Ordak, M., Orisakwe, O.E., Orish, V.N., Ortega-Altamirano, D.V., Ortiz, A., Ortiz-Prado, E., Osman, W.M.S., Osuagwu, U.L., Osuolale, O., Otoiu, A., Otstavnov, S.S., Ouyahia, A., Ouyang, G., Owolabi, M.O., Ozten, Y., A, M.P.P., Fallahy, M.T.P., Pan, F., Pan, H.-F., Pana, A., Panda, P., Panda-Jonas, S., Pangaribuan, H.U., Panos, G.D., Panos, L.D., Pantazopoulos, I., Stoian, A.M.P., Parikh, R.R., Park, S., Parthasarathi, A., Pashaei, A., Passera, R., Patel, H.M., Patel, J., Patil, S., Patoulias, D., Patthipati, V.S., Paudel, U., Paun, M., Toroudi, H.P., Pease, S.A., Peden, A.E., Pedersini, P., Peng, M., Pensato, U., Pepito, V.C.F. , Peprah, P., Pereira, G., Peres, M.F.P., Perianayagam, A., Perico, N., Perna, S., Pestell, R.G., Petermann-Rocha, F.E., Pham, H.T., Philip, A.K., Pierannunzio, D. , Pigeolet, M., Pigott, D.M., Plotnikov, E., Poddighe, D., Pollner, P., Poluru, R., Postma, M.J., Pourali, G., Pourshams, A., Pourtaheri, N., Prabhu, D., Prada, S.I. , Pradhan, P.M.S., Prasad, M., Prashant, A., Purohit, B.M., Puvvula, J., Qasim, N.H., Qattea, I., R, D., Rad, M.R., Radfar, A., Radhakrishnan, V., Raee, P., Shahraki, H.R., Rafiei, A., Alavi, S.N.R., Raggi, C., Raghav, P.R., Rahim, F., Rahim, M.J., Rahman, M.M., Rahman, M.H.U., Rahman, M., Rahman, M.A., Rahmanian, V., Rahmati, M., Rahnavard, N., Rai, P., Raimondo, D., Rajabpour-Sanati, A., Rajput, P., Ram, P., Ramasamy, S.K., Rana, J., Rana, K., Rana, S.S., Ranabhat, C.L., Rancic, N., Rane, A., Ranjan, S., Rao, C.R., Rao, I.R., Rapaka, D., Rasella, D., Rashedi, S., Rashedi, V., Rashidi, M.-M., Rasul, A., Ratan, Z.A., Babu, G.R., Rauniyar, S.K., Ravikumar, N., Rawaf, D.L., Rawaf, S., Rawassizadeh, R., Rawlley, B., Reddy, M.M.R.K., Redwan, E.M.M., Remuzzi, G., Reshmi, B., Rezaei, N., Nejad, A.R., Rezaeian, M., Riad, A., Riaz, M.A., Rickard, J., Rikhtegar, R., Robinson-Oden, H.E., Rodrigues, C.F., Rodriguez, J.A.B., Rohilla, R., Romadlon, D.S., Ronfani, L., Rout, H.S., Roy, B., Roy, N., Roy, P., Rubagotti, E., Ruela, G. de A., Rumisha, S.F., Runghien, T., S, M., N, C.S., Saad, A.M.A., Saadatian, Z., Saber-Ayad, M.M., SaberiKamarposhti, M., Sabour, S., Sada, F., Saddik, B., Sadee, B.A., Sadeghi, Ehsan, Sadeghi, Erfan, Saeb, M.R., Saeed, U., Safi, S.Z., Sagoe, D., Saha, M., Sahebkar, A., Sahoo, S.S., Sahu, M., Saif, Z., Sakshaug, J.W., Salamati, P., Salami, A.A., Saleh, M.A., Salem, M.R., Salem, M.Z.Y., Salimi, S., Samadzadeh, S., Samodra, Y.L., Samuel, V.P., Samy, A.M., Sanabria, J., Sanadgol, N., Sanna, F., Santric-Milicevic, M.M., Saqib, H., Saraswathy, S. Y.I., Saravanan, A., Saravi, B., Sarikhani, Y., Sarkar, T., Sarmiento-Suárez, R., Sarode, G.S., Sarode, S.C., Sarveazad, A., Sathian, B., Sathish, T., Sathyanarayan, A., Sayeed, A., Sayeed, M.A., Scarmeas, N., Schlee, W., Schuermans, A., Schwebel, D.C., Schwendicke, F., Selvaraj, S., Sengupta, P., Senthilkumaran, S., Sepanlou, S.G., Serban, D., Serván-Mori, E., Sethi, Y., SeyedAlinaghi, S., Seyedi, S.A., Seylani, A., Shafie, M., Shah, J., Shah, P.A., Shahbandi, A., Shahid, S., Shahwan, M.J., Shaikh, A., Shaikh, M.A., Shamim, M.A., Shams-Beyranvand, M., Shamsi, M.A., Shanawaz, M., Shankar, A., Shannawaz, M., Sharath, M., Sharfaei, S., Sharifan, A., Sharifi-Rad, J., Sharma, M., Sharma, R., Sharma, U., Sharma, V., Shastry, R.P., Shavandi, A., Shaw, D. H., Shayan, A.M., Shayan, M., Shehabeldine, A.M.E., Sheikh, A., Sheikhi, R.A., Shenoy, M.M., Shetty, P.H., Shi, P., Shiferaw, D., Shigematsu, M., Shiri, R., Shirkoohi, R., Shittu, A., Shivarov, V., Shokraneh, F., Shool, S., Shorofi, S.A., Shuja, K.H., Shuval, K., Siddig, E.E., Silva, J.P., Silva, L.M.L.R., Silva, S., Simonetti, B., Singal, A., Singh, A., Singh, B.B., Singh, J.A., Siraj, M.S., Smith, G., Socea, B., Sokhan, A., Solanki, R., Solanki, S., Soleimani, H., Soliman, S.S.M., Solomon, Y., Song, Y., Sorensen, R.J.D., Spartalis, M., Sreeramareddy, C.T., Srivastava, V.K., Stanikzai, M.H., Starodubov, V.I., Starodubova, A.V., Stefan, S.C. , Steiropoulos, P., Stokes, M.A., Subramaniyan, V., Suleman, M., Abdulkader, R.S., Sultana, A., Sun, J., Swain, C.K., Sykes, B.L., Szarpak, L., Szeto, M.D., Szócska, M., Damavandi, P.T., Tabarés-Seisdedos, R., Malazy, O.T., Tabatabaeizadeh, S.-A., Tabatabai, S., Tabb, K.M., Tabish, M., Soodejani, M.T., Taiba, J., Tajbakhsh, A., Talaat, I.M., Talukder, A., Tampa, M., Tamuzi, J.L., Tan, K.-K., Tang, H., Tareke, D.A.D., Tariku, M.K., Tat, V.Y., Tavangar, S.M., Teimoori, M., Temsah, M.-H., Temsah, R.M.H., Teramoto, M., Terefa, D.R., Tesler, R., Teye-Kwadjo, E., Thakur, R., Thangaraju, P., Thankappan, K.R., Thapar, R., Tharwat, S., Thayakaran, R., Thomas, N., Tichopad, A., Ticoalu, J.H.V., Tiruye, T.Y., Titova, M.V., Tonelli, M., Tovani-Palone, M.R., Traini, E., Tran, J.T., Tran, N.M., Trihandini, I., Tromans, S.J., Truyen, T.T.T.T., Tsatsakis, A., Tsermpini, E.E., Tumurkhuu, M., Tyrovolas, S., Uddin, S.M.N., Udoakang, A.J., Udoh, A., Ullah, A., Ullah, Saeed, Ullah, Sana, Umakanthan, S., Umeokonkwo, C.D., Unim, B., Unnikrishnan, B., Upadhyay, E., Usman, J.S., Vacante, M., Vahabi, S.M., Vaithinathan, A.G., Valizadeh, R., Eynde, J.V. den, Varavikova, E., Varga, O., Vart, P., Varthya, S.B., Vasankari, T.J., Vellingiri, B., Venugopal, D. , Verghese, N.A., Verma, M., Veroux, M., Verras, G.-I., Vervoort, D., Villafañe, J.H., Vinayak, M., Violante, F.S., Vishwakarma, M., Vladimirov, S.K., Vlassov, V., Vo, B., Volovat, S.R., Vos, T., Vujcic, I.S., Wafa, H.A., Waheed, Y., Wakwoya, E.B., Wang, C., Wang, D., Wang, F., Wang, S., Wang, Y., Wang, Y.-P., Ward, P., Wassie, E.G., Watson, S., Weaver, M.R., Weerakoon, K.G., Weiss, D.J., Wells, K.M., Wen, Y.F., Westerman, R., Wiangkham, T., Wickramasinghe, D.P., Wickramasinghe, N.D., Willeit, P., Wondimagegene, Y.A., Wu, F., Xia, J., Xiao, H., Xu, G., Xu, S., Xu, X., Yadollahpour, A., Yaghoobpoor, S., Yaghoobpour, T., Yaghoubi, S., Yahaya, Z.S., Yang, D., Yang, L., Yano, Y., Yaribeygi, H., Ye, P., Yesodharan, R., Yesuf, S.A., Yezli, S., Yigezu, A. , Yip, P., Yon, D.K., Yonemoto, N., You, Y., Younis, M.Z., Yousefi, Z., Yu, C., Yu, Y., Yuan, C.-W., Zafari, N., Zakham, F., Zaki, N., Zamagni, G., Zandi, M., Zandieh, G.G.Z., Zangiabadian, M., Zastrozhin, M.S., Zhang, H., Zhang, M., Zhang, Y., Zhong, C., Zhou, J., Zhu, B., Zhu, L., Zielińska, M., Zou, Z., Zyoud, S.H., Murray, C.J.L., Smith, A.E., Vollset, S.E., 2024. Global fertility in 204 countries and territories, 1950–2021, with forecasts to 2100: a comprehensive demographic analysis for the global burden of disease study 2021. Lancet 403, 2057–2099. https://doi.org/10.1016/S0140-6736(24)00550-6.

Björkholm, S., 2025. Deep moral disagreements and defective contexts. Synthese 205, 191. https://doi.org/10.1007/s11229-025-05013-7.

Blackstone, A., Stewart, M.D., 2012. Choosing to be childfree: research on the decision not to parent. Sociol. Compass 6, 718–727. https://doi.org/10.1111/j.1751-9020.2012.00496.x.

Candiotto, L., 2025. The problem of sentience. Phenomenol. Cognitive Sci. 24, 191–211. https://doi.org/10.1007/s11097-024-09994-7.

Candiotto, L., 2024. Eros In-between and all-around. Hum. Stud. 47, 185–203. https://doi.org/10.1007/s10746-024-09718-5.

Candiotto, L., 2023. What I cannot do without you. Towards a truly embedded and embodied account of the socially extended mind. Phenomenol. Cognitive Sci. 22, 907–929. https://doi.org/10.1007/s11097-022-09862-2.

Candiotto, L., 2022. Loving the Earth by loving a place: a situated approach to the love of nature. Constr. Found. 17, 179–189.

Candiotto, L., 2019. Emotions in-between. The affective dimension of participatory sense-making. In: Candiotto, L. (Ed.), The Value of Emotions for Knowledge. Presented at the Feeling Reasons. the Role of Emotions in Reasoning. palgrave macmillan, Cham, Switzerland, pp. 235–260. https://doi.org/10.1007/978-3-030-15667-1.

Candiotto, L., De Jaegher, H., 2021. Love In-Between. J. Ethics 25, 501–524. https://doi.org/10.1007/s10892-020-09357-9.

Cartlidge, J., 2022. Lyotard, the differend and the philosophy of deep disagreement. Synthese 200, 359. https://doi.org/10.1007/s11229-022-03841-5.

Colombetti, G., 2013. The Feeling Body: Affective Science Meets the Enactive Mind. MIT Press.

Colombetti, G., Torrance, S., 2009. Emotion and ethics: an inter-(en)active approach. Phenomenol. Cognitive Sci. 8, 505–526. https://doi.org/10.1007/s11097-009-9137-3.

Cooper, M.M., 2011. Rhetorical agency as emergent and enacted. Coll. Compos. Commun. 62, 420–449.

Cuffari, E., Fourlas, G., Whatley, M., 2022. “Bringing new life in”: hope as a know-how of not knowing. Front. Psychol. 13. https://doi.org/10.3389/fpsyg.2022.948317.
de Haan, S., 2020. Enactive Psychiatry. Cambridge University Press.
De Jaegher, H., 2021. Loving and knowing: reflections for an engaged epistemology. Phenomenol. Cognitive Sci. 20, 847–870. https://doi.org/10.1007/s11097-019-09634-5.
De Jaegher, H., Di Paolo, E., 2007. Participatory sense-making. Phenomenol. Cogn. Sci. 6, 485–507. https://doi.org/10.1007/s11097-007-9076-9.
De Jaegher, H., Di Paolo, E., Gallagher, S., 2010. Can social interaction constitute social cognition? Trends Cognit. Sci. 14, 441–447 https://doi.org/10.1016/j.tics.2010.06.009.
de Ridder, J., 2021. Deep disagreements and political polarization. In: Edenberg, E., Hannon, M. (Eds.), Political Epistemology. Oxford University Press, New York, pp. 226–243.
Di Paolo, E., 2022. Enaction and Dialectics - Part I. Dialect. Syst. URL. https://www.dialecticalsystems.eu/contributions/enaction-and-dialectics-part-i/. (Accessed 27 March 2025).
Di Paolo, E., De Jaegher, H., 2017. Neither individualistic nor interactionist. In: Durt, C., Fuchs, T., Tewes, C. (Eds.), Embodiment, Enaction, and Culture: Investigating the Constitution of the Shared World. MIT Press, pp. 87–105.
Di Paolo, E.A., 2021. Enactive becoming. Phenomenol. Cogn. Sci. 20, 783–809. https://doi.org/10.1007/s11097-019-09654-1.
Di Paolo, E.A., Cuffari, E.C., Jaegher, H.D., 2018. Linguistic Bodies: The Continuity Between Life and Language. MIT Press.
Di Paolo, E.A., De Jaegher, H., 2022. Enactive ethics: difference becoming participation. Topoi 41, 241–256. https://doi.org/10.1007/s11245-021-09766-x.
Fogelin, R., 1985. The logic of deep disagreements. Informal Log. 25, 1–8. https://doi.org/10.22329/il.v25i1.1040.
Gambarotto, A., van Es, T., 2025. Enactivizing dialectics: from individual to social normativity and back. Topoi. https://doi.org/10.1007/s11245-025-10261-w.
García, E., Di Paolo, E.A., De Jaegher, H., 2022. Embodiment in online psychotherapy: a qualitative study. Psychol. Psychother. Theor. Res. Pract. 95, 191–211. https://doi.org/10.1111/papt.12359.
Gariazzo, M., 2024. Against Pritchard’s refutation of epistemic relativism. Theor. Int. J. Theory Hist. Found. Sci.. https://doi.org/10.1387/theoria.26482.
Gilbert, M.A., 2022. Multi-modal 2020: multi-modal argumentation 30 years later. Informal Log. 42, 487–506. https://doi.org/10.22329/il.v42i3.7497.
Gilbert, M.A., 2014. Arguing with People. Broadview Press.
Gilbert, M.A., 2004. Emotion, argumentation and informal logic. Informal Log. 24, 245–264. https://doi.org/10.22329/il.v24i3.2147.
Gilbert, M.A., 1997. Coalescent Argumentation. L. Erlbaum Associates, Mahwah, N.J.
Gilbert, M.A., Carozza, L., 2024. Michael A. Gilbert: not arguing logically is not illogical: other ways of communicating arguments. Argum. Anal. Discours.. https://doi.org/10.4000/aad.8119.
Godden, D., 2019. On the rational resolvability of deep disagreement through meta-argumentation: a resource audit. Topoi 38, 725–750. https://doi.org/10.1007/s11245-019-09682-1.
Hample, D. (Ed.), 2021. Local Theories of Argument. Routledge, Abingdon.
Hirsch, R., 2010. Making meaning together: a distributed story of speaking and thinking. Lang. Sci. 32, 528–535. https://doi.org/10.1016/j.langsci.2010.04.001.
Johnson, D., 2022. Deep disagreement, Hinge commitments, and intellectual humility. Episteme 19, 353–372. https://doi.org/10.1017/epi.2020.31.
Kane, L., 2023. Weighing identity in procreative decisions. Fem. Philos. Q. 9. https://doi.org/10.5206/fpq/2023.3.15151.
Kiš, S., 2025a. Frustrated and aware: knowing when disagreement is deep. Informal Log. 45, 78–104. https://doi.org/10.22329/il.v45i1.8444.
Kiš, S., 2025b. Arguments for non-adversariality are not self-refuting. Topoi. https://doi.org/10.1007/s11245-025-10286-1.
Kiš, S., 2023. Does deep moral disagreement exist in real life? Organon F 30, 255–277 https://doi.org/10.31577/orgf.2023.30302.
Kyselo, M., Tschacher, W., 2014. An enactive and dynamical systems theory account of dyadic relationships. Front. Psychol. 5. https://doi.org/10.3389/fpsyg.2014.00452.
Lavorerio, V., 2023. Cognitive peerhood, epistemic disdain, and affective polarisation: the perils of disagreeing deeply. Episteme 20, 798–812. https://doi.org/10.1017/epi.2023.11.
Lavorerio, V., 2020. Fogelin's theory of deep disagreements: a relativistic reading. Philos. Investig. 43, 346–362. https://doi.org/10.1111/phin.12274.
Levy, N., 2021. The surprising truth about disagreement. Acta Anal. 36, 137–157. https://doi.org/10.1007/s12136-020-00437-x.
Lynch, M.P., 2016. After the spade turns: disagreement, first principles and epistemic contractarianism. Int. J. Study Skepticism 6, 248–259. https://doi.org/10.1163/22105700-00603010.
Maldonado, F.B., 2025. Argumentation, cooperation, and disagreement. Informal Log. 45, 105–137. https://doi.org/10.22329/il.v45i1.8416.
Manhire, R., Kronqvist, C., 2025. “Tap-dancing around the conversation”: difficulties in an intimate deep moral disagreement. Synthese 205, 71. https://doi.org/10.1007/s11229-025-04920-z.
Matthews, E.J., Desjardins, M., 2017. Remaking our identities: couples' experiences of voluntary childlessness. Fam. J. 25, 31–39. https://doi.org/10.1177/1066480716679643.
McGlynn, A., 2023. Hidden depths: testimonial injustice, deep disagreement, and democratic deliberation. Int. J. Phil. Stud. 31, 361–381. https://doi.org/10.1080/09672559.2023.2263710.
Melchior, G., 2023. Rationally Irresolvable Disagreement. https://doi.org/10.1007/s11098-023-01933-7. Philos. Stud.
Miranda de Figueiredo, N., Rolla, G., Nunes de Vasconcelos, G., 2025. Participatory sense-making and knowing-in-connection in VR. Lang. Sci. 108, 101705. https://doi.org/10.1016/j.langsci.2024.101705.
O'Keefe, D.J., 1977. Two concepts of argument. J. Am. Forensic Assoc. 13, 121–128. https://doi.org/10.1080/00028533.1977.11951098.
Perelman, C., Olbrechts-Tyteca, L., 1991. The New Rhetoric: A Treatise on Argumentation. University of Notre Dame Pess.
Perry, S.L., McElroy, E.E., Schnabel, L., Grubbs, J.B., 2022. Fill the Earth and subdue it: christian nationalism, ethno-religious threat, and nationalist pro-natalism. Sociol. Forum 37, 995–1017. https://doi.org/10.1111/socf.12854.
Phillips, K., 2021. Deep disagreement and patience as an argumentative virtue. Informal Log. 41, 107–130. https://doi.org/10.22329/il.v41i1.6689.
Popa, E.O., 2022. On the rational resolution of (deep) disagreements. Synthese 200, 1–15. https://doi.org/10.1007/s11229-022-03753-4.
Popova, Y.B., 2019. Participatory sense-making in narrative experience. In: Languaging Relations for Transforming the Literacy and Language Arts Classroom. Routledge.
Pritchard, D., 2025a. Axiological Hinge commitments. Synthese 205, 49. https://doi.org/10.1007/s11229-024-04898-0.
Pritchard, D., 2025b. Deep disagreement. In: Baghramian, M., Carter, J.A., Cosker-Rowland, R. (Eds.), The Routledge Handbook of Philosophy of Disagreement. Routledge, New York, pp. 51–61. https://doi.org/10.4324/9781003154471.
Pritchard, D., 2024. Beliefs, delusions, Hinge commitments. Synthese 204, 40. https://doi.org/10.1007/s11229-024-04703-y.
Pritchard, D., 2023. Understanding deep disagreement. Int. J. Phil. Stud. 31, 301–317. https://doi.org/10.1080/09672559.2023.2263709.
Pritchard, D., 2018. Wittgensteinian Hinge epistemology and deep disagreement. Topoi 40, 1117–1125. https://doi.org/10.1007/s11245-018-9612-y.
Ranalli, C., 2021. What is deep disagreement? Topoi 40, 983–998 https://doi.org/10.1007/s11245-018-9600-2.
Ranalli, C., Lagewaard, T., 2022a. Deep disagreement (part 1): theories of deep disagreement. Philos. Compass 17, 1–18. https://doi.org/10.1111/phc3.12886.
Ranalli, C., Lagewaard, T., 2022b. Deep disagreement (part 2): epistemology of deep disagreement. Philos. Compass 17, e12887. https://doi.org/10.1111/phc3.12887.
Rasmussen, C., 2023. Fertile ground: the biopolitics of natalist populism. ACME int. J. Crit. Geogr. ACME rev. Int. Géographie crit. ACME Rev. Int. Geogr. Crít. 22, 1069–1092. https://doi.org/10.7202/1102113ar.
Siegel, H., 2024. Arguing about arguing with arguments: replies to my critics. Informal Log. 44, 509–542. https://doi.org/10.22329/il.v44i4.8801.

Siegel, H., 2023. Arguing with arguments: argument quality, argumentative norms, and the strengths of the epistemic theory. Informal Log. 43, 465–526. https://doi.org/10.22329/il.v43i4.7667.
Steffensen, S.V., 2012. Care and conversing in dialogical systems. Lang. Sci., Car. Convers.: Distr. Dynam. Lang. 34, 513–531. https://doi.org/10.1016/j.langsci.2012.03.008.
Stephan, A., Walter, S., 2020. Situated affectivity. In: The Routledge Handbook of Phenomenology of Emotion. Routledge.
Tanesini, A., 2020. Eloquent silences: silence and dissent. In: Johnson, C.R. (Ed.), Voicing Dissent: The Ethics and Epistemology of Making Disagreement Public, Routledge Studies in Contemporary Philosophy. Routledge, Taylor & Francis Group, London New York.
Tindale, C., 2022. On the kisceral mode of argumentation. Informal Log. 42, 603–621. https://doi.org/10.22329/il.v42i3.7501.
van Calcar, M.M., 2023. Teaching argumentative skills with LEGO building a case for an embodied and enactive approach. Metodo 11, 163–196. https://doi.org/10.19079/metodo.11.1.163.
van Eemeren, F.H., Grootendorst, R., 2004. A Systematic Theory of Argumentation: The pragma-dialectical Approach. Cambridge University Press, Cambridge.
Varela, F.J., 1999. Ethical Know-How: Action, Wisdom, and Cognition. Stanford University Press.
Varela, F.J., Rosch, E., Thompson, E., 1991. The embodied mind. Embod. Mind Cogn. Sci. Hum. Exp..
von Maur, I., 2021. Taking situatedness seriously. Embedding affective intentionality in forms of living. Front. Psychol. 12. https://doi.org/10.3389/fpsyg.2021.599939.
We Live in Time, 2024, p. A24.
Weber, A., 2019. Enlivenment: Toward a Poetics for the Anthropocene. MIT Press.
Weber, A., 2017. Matter and Desire: An Erotic Ecology. Chelsea Green Publishing.
Weber, A., 2016. Biopoetics, Biosemiotics. Springer, Netherlands, Dordrecht. https://doi.org/10.1007/978-94-024-0832-4.
Weichold, M., Candiotto, L., 2023. The ethics of sense-making. Front. Psychol. 14. https://doi.org/10.3389/fpsyg.2023.1240163.
Wittgenstein, L., 1972. On Certainty. HarperCollins.
Yu, F., Ahmed, I., Salerno, R., Sarli, T., 2023. Yes or no: using narrative therapy to help couples with childbearing decision conflict. Fam. J. 31, 51–59. https://doi.org/10.1177/10664807221126195.