

Communication in the Face of Mismatch

Similarity and Triangulation

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Abstract

Communication seems to happen in the face of people's (extremely) varying perspectives or understandings of subject matter. As many have noted, the presence of this communicative mismatch—what we may call 'the mismatch problem'—puts a lot of pressure on a naïve model of communication. According to this model, communicative success is a matter of content match or sharing. Here I focus on the kind of non-naïve response that a theory of 'triangulation' makes available. I shall discuss several features of triangulation theory and critically examine a recent articulation based on the notion of 'aboutness' (Sandgren [2019, 2021, 2023]). This articulation proposes content-free triangulation conditions in our explanations of communicative success. By contrast, I will suggest that we can use triangulation theory to address the mismatch problem without neglecting content by appealing to a meta-representational notion of content similarity. This notion, I argue, allows us to capture the necessary coordination between subjects, as well as the differences in their understandings.

Keywords

aboutness; communication; content; triangulation; understanding

1 Introduction

Most accounts of communication are built on or around content. Indeed, it has been common to attempt to explain communicative success in terms of an identity relation between

subjects' mental contents. However, communication seems to happen in the face of people's (extremely) varying perspectives or understandings of subject matter. Communicative episodes will often take place, for instance, between subjects for whom some concepts differ in application.

Consider, for example, two subjects discussing graffiti, where one subject takes it to be an art form, while the other subject does not. Nothing intuitively precludes communication from running smoothly in great many cases, involving a wide range of utterances on the topic of graffiti. This sort of interpersonal variability (amongst other forms to be seen) raises what I call 'the mismatch problem' for content sameness accounts. The presence of mismatch puts a lot of pressure on a model of communication based on content sameness, as a difference in understanding typically presupposes a difference in mental content.

Many authors have pointed out that content variability of this sort invites a reconsideration of the conditions on successful communication that departs from naïve appeals to content match or sharing. Developed reactions include various forms of propositional convergence, appeals to the notion of coordination, and reformulations of the conditions on thought sharing (see Marques and Wikforss [2020], Bermúdez *et al.* [2025]).

In this paper, however, I shall explore the prospects for an alternative view based on the notion of triangulation. Despite its Davidsonian credentials, triangulation has attracted little attention as a possible resource in the account of communication in the face of mismatch.

I begin, in section 2, by presenting the received view of communicative success as content identity, and some ways in which the phenomenon of mismatch can appear, creating tension for it. I then present the notion of triangulation, which can be seen to arise as a response to said problem. This notion has been proposed historically (Davidson [1982, 1991]), but has recently resurfaced in new shapes. In section 3, I focus on the account favoured by Alexander Sandgren, which is the most developed, contemporary triangulation-based reaction to the mismatch problem (Sandgren [2019, 2021, 2023]). His theory provides the much needed bridge between speakers' variable content in an exchange, thus directly addressing mismatch. While Sandgren's approach has merit, his position joins a notorious family of content-neglecting views which renders content useless for explaining communicative success (Pagin [2008]). Instead, he sets forth a distinctive notion—*aboutness*—to do the work. I shall argue that this feature of Sandgren's account makes it ultimately ineffective. Along the way, I shall also provide some insights into the basic features of triangulation as an account of communication from the point of view of symmetry and cognitive perspective. In sections 4 and 5, I raise these issues that also reflect, I believe, structural problems for

content-neglecting views.

In view of this matching problem, it might seem natural to suggest that content is not the adequate notion to work with. My aim in this paper is to show that we can use triangulation theory to meet the challenge of the mismatch problem without neglecting mental content. We can instead develop a content *similarity* view of communication, capable of accounting for the required *desiderata*, i.e. capturing the necessary coordination between communicating subjects involving the differences in their understandings entailed by the mismatch problem. The view is fully fleshed out in section 6. If I am right, this version of the triangulation framework has the resources to provide an account of communication capable of embracing the existence of said mismatch at its core.

2 Communication and content

When it comes to successful communication, the received view has it that an audience must retrieve, grasp, or entertain the very same content or proposition that a speaker expresses *via* their utterance. Such a view has gone under a few names: it is commonly known as the ‘standard picture of communication’ (Buchanan [2010]), but it has also been referred to as the ‘Naïve conception of communication’ (Heck [2002]), the ‘belief-transfer model’ (Egan [2007]), or the ‘FedEx model of communication’ (Weber [2013]). At the heart of it is the idea that there needs to be a relation of identity between the contents of speaker and hearer. It is typically attributed to Frege himself, with his oft-quoted “common store of thoughts which is transmitted from one generation to another” (Frege [1892/1997: 29/154]). But one can find both implicit and more explicit commitments to the view all across the philosophy of language, including in more recent work.

Begby [2013], for instance, assumes the view from the outset in a critical discussion of semantic minimalism (*versus* contextualism):

I take the following three criteria to be relatively uncontroversial elements of any theory of linguistic communication. Linguistic communication minimally involves (1) a speaker and a hearer tokening the same proposition (or in Fregean language, sharing the same thought). [Begby 2013: 960]

More recently, Sawyer [forthcoming] aims to defend a shared content view of communication, agreement and disagreement from within the framework of content externalism (which suits sameness views very naturally):

It is natural to think that successful communication takes place between two people when a single propositional content is expressed by the first and understood by the second. [...] This ‘shared content’ or ‘shared thought’ view also provides a natural account of agreement and disagreement [...]. A shared thought view fits naturally within an externalist account of the content of propositional attitudes [Sawyer forthcoming: 1–3].

However, against such commitments to content identity views, it seems that communication can often go ahead unhindered in cases where the communicating subjects hold different perspectives or understandings on the subject matter. Consider the subjects involved in Majid’s [2010] experiment,¹ where, when asked to colour the arm of a drawing of a human body, half the dutch speaking participants coloured from the shoulder down to the hand, while the other half of dutch speakers left the hand uncoloured. It seems plausible that two subjects who differed in their application of the concept ARM (as the experiment seems to show) might still be able to communicate effectively about arms in most cases.

Specifically, let us imagine subject A (who would paint the arm right down to the hand) telling subject B (who would stop colouring at the wrist): ‘I had to keep my arm in a cast for two weeks after the accident’. Nothing seems to indicate that B wouldn’t be capable of understanding the utterance, possibly giving some very coherent answer to it, which A might in turn understand and give a further reply to, and so on and so forth, even in the face of B’s representing (the content of) A’s utterance as suggesting that his hand was cast-free. Or consider speakers for whom the concept WEEK also differs in application, understood by some as the period of 7 days starting from Sunday, by others as the same 7 day period commencing on Monday. We may imagine cases where this difference in application might lead two subjects to a misunderstanding, but it is also plausible that they might communicate successfully in great many cases with utterances containing ‘week’ (and its associated concept).²

These rather intuitive cases of variability in how subjects understand concepts give us strong reasons to think that sameness of content is an unnecessarily demanding criterion for communicative success. It is therefore not a surprise that the received view has come under heavy attack from various flanks, with some form or other of mismatch playing a

¹ The mismatch situation highlighted by this experiment is also part of the motivation for Pagin’s [2020] content similarity view.

² Cf Verdejo & De Donato [2021]. See Schroeder [2007], for a very similar point on this kind of conceptual variability.

role.

One can see another such attack to the naïve conception in the literature on indexical thought. Heck puts the point quite bluntly: “The belief that someone expresses when she says “I am a philosopher” is the self-conscious belief that she herself is a philosopher. [...] I cannot so much as entertain that belief” (Heck [2002: 28]). In such a case of communication involving a first-person thought, then, the speaker picks herself out self-consciously, while the hearer must do so demonstratively (her belief will include a third-person pronoun).

A quote from Recanati explicates this point nicely:

The Naïve Conception of Communication rests on the idea that communication is the *replication* of thoughts [...]. But in the indexical case, there is no replication, but some kind of systematic transformation. The truth-conditions can be preserved across contexts only if the internal content of the thought is modified or adjusted so as to compensate for the shift in point of view from the speaker to the hearer. [Recanati 2016: 149–50]

Many in the literature on indexicality recognise the problem of upholding content sameness relation amongst speakers.³

Indexicality aside, situations of mismatch can arise easily in cases of communication which involve context-sensitivity more generally. Buchanan [2010] constructs incisive cases that bring to light the underdetermination in the exact proposition a speaker expresses and which leaves the hearer with an absolute impossibility to grasp the exact proposition that was expressed, thus infringing the standard picture’s core thesis, and again creating a schism between speakers’ contents.⁴ This is made worse by the “generality and indifference” characteristic of the speaker’s communicative intentions.

For instance, he asks us to consider the underdetermination present in an utterance of ‘Every beer is in the bucket’, in the context of two friends preparing for a house party. Buchanan’s puzzle against the standard view is that there is no *one* specific proposition that the hearer must retrieve in order to understand said utterance, nor is there any one specific proposition the utterer might have had in mind when uttering it. His proposal in solving the issue is not to abandon all talk of content/propositions, but to understand speakers as expressing proposition *types* (the underspecification occurring within the type)

³ See García Carpintero & Torre’s [2016] volume on the topic of indexicality for discussion of this over multiple chapters and contributions.

⁴ Abreu Zavaleta [2021a, 2021b] makes a very similar point, a thesis he has called ‘Semantic Variance’.

and not any one token proposition, and to furthermore relax the conditions for successful communication so that it be enough that hearers retrieve any proposition belonging to that type.

These cases are manifestations of what I'm here calling 'the mismatch problem'. In light of this challenge to the standard view, scholars have proposed a rich assortment of reactions. In the case of indexicals these include two-dimensional accounts (Howell [2024]) and ability-based or perspective-based concepts (Bermúdez [2017], Verdejo [2021]). In the case of underdetermination, they encompass truth-maker semantics (Abreu Zavaleta [2023]), bundled propositions (Bowker [2019]) or truth-value normalisation (Pagin [2020]).

In this paper, I will be concerned with a relatively unattended proposal based on the notion of triangulation. If speakers were allowed to triangulate on the particular subject their exchange is about, this will pave the way to overcome the mismatch problem. This is precisely the suggestion convincingly developed in the work of Alexander Sandgren. However, in the version of the theory that Sandgren offers, the notion of content is replaced with a content-independent notion of aboutness. This is understandable. After all, it seems that the source of the difficulties surrounding the mismatch problem is the fact that content—and, in particular, mental content—is subject to great variation from subject to subject and, therefore, that we might need an alternative to such a notion in our account. In pursuing this route, I shall argue, Sandgren joins a venerable club of content-neglecting views. In what follows I shall spell out this connection, and argue that the content-neglecting version of triangulation theory is fundamentally flawed. We should, in consequence, formulate triangulation theory in content-involving terms. In the articulation I offer of this approach, it yields a notion of content similarity ready to be applied to the analysis of communication.

3 Communication without content

It might appear that there is appeal in doing away with content altogether in the communication equation. This is so especially if there are other notions and relations to do the explanatory work; I dub these 'content-neglecting views'. I am not the first to discuss them: Pagin [2008] attempts to develop a unified attack on key content-neglecting accounts, in order to firmly reestablish the idea that communication requires an explanation in terms of content relations. Amongst others, Pagin targets the linguistic behaviourism of Quine. In fact, one might see Quine's [1960] scenario of radical translation as having already historically invoked a situation of mismatch for his thesis of the inscrutability of reference.

For Quine's radical translator, the only evidence on which to go by in constructing a translation manual is the linguistic and bodily behaviour of the translated subject in the face of external stimulus. By establishing relations of (stimulus) synonymy, the translator can ascribe (stimulus) meanings to the translated subject. The problem, however, is that nothing in his deductions of (stimulus) synonymy, on the part of the translator, guarantees sameness of reference. There could be countless equally functioning translation manuals for the native's stimulus meanings (and observation sentences, more generally) in diverging ways, and there would be no way to settle the matter as to which contains the genuine translations (the actual co-referring pairings). This leads to the conclusion that reference is inscrutable and that there is an inherent indeterminacy in the attribution of meaning. While this does not hinder communication, it does seem to indicate that there is an insurmountable gap in establishing what exactly the speaker is intending to mean by his utterances.

The general point Pagin makes against this and other content-neglecting views⁵ is that they all take intersubjectivity to be prior and more basic to subjectivity⁶ when explaining communication, which ultimately causes them to fail at giving a satisfying account. By displacing content from the picture, there is always some aspect of communicative success that is left unexplained. Against these "anti-mentalistic accounts", Pagin defends the need for a content-based view, his own view couched in terms of content similarity (Pagin [2020]). I join Pagin in defending the need for an explanation of communicative success as involving relations between contents. Concretely, I critically examine a more recent and thorough attempt at articulating a content-neglecting view not under the scope of Pagin's earlier defence due to Alexander Sandgren whose content-neglecting view is built upon an explicit acknowledgment of content mismatch.⁷ Taking inspiration from Lewis [1997], Sandgren [2023] puts forward a view on the relation between mental and linguistic content which he calls 'autonomism'. According to Sandgren, in some fundamental sense, mental

⁵ Aside from Quine's influential proposal, Pagin also targeted views that accept talk of content but require something else to pull the weight in the explanations of successful communicative exchanges, such as a requirement of knowledge of a shared semantics between speakers, or a reliability requirement in the production and retrieval of speech.

⁶ Here, subjectivity just means this individual attribution of contents to speakers that must match in some way.

⁷ Although I band together Pagin's targets and Sandgren's account under the content-neglecting moniker, the latter does not fall neatly into the "anti-mentalistic" approach Pagin worries himself with (as Quine's behaviourism clearly does).

content and linguistic content are autonomous from each other, as they answer to different constraints. For language to play its role in communication, linguistic content must be, Sandgren claims, “robust in the face of deviant uses of expressions” (Sandgren [2023: 96]). He draws this conclusion by appeal to Burge’s [1979] famous arthritis case, which served to establish the basis for social externalism; the fact that the patient manages to communicate despite misusing the concept shows that the linguistic content contained in her utterance is autonomous from her (incorrect) understanding of said concept. On the other hand, mental content presents no such autonomy from the user, its function being to guide her in reasoning, action, and navigating the world. To perform such a task, it must be absolutely sensitive to the believer’s psychological states (including ignorance and error).⁸

This gap between linguistic and mental content, and between the (narrow) mental contents of speakers, is at the core of autonomism.⁹ Such autonomy between contents results in the impossibility of recovering the content of a belief from the content of a sentence used to express it, nor vice-versa. Moreover, construed this way, subjects’ (narrow) mental contents will hardly ever be the same. Consequently, communication cannot be understood as a replication of the speaker’s belief content by the hearer *via* the speaker’s linguistic content (as the received view suggested). For the autonomist, who severely disconnects mental and linguistic content, these kinds of explanation are simply unavailable.¹⁰

Instead, Sandgren suggests to forgo content altogether in the explanation and to base it all on another property of belief,—*aboutness*—, and a new relation to do the job, sameness of aboutness. Aboutness therefore provides the much needed bridge between speakers in an exchange without resorting to the problematic and fractured notion of content. A successful communicative episode, then, could involve a (deep) mismatch between the mental contents for the interlocutors and also between their mental contents and the contents of their utterances, as long as the beliefs exchanged are *about* the same.

What does it take for two thoughts to be about the same? To answer this question, Sandgren invokes *triangulation theory*, presented as a meta-representational theory of intentional identity/aboutness. His particular version of this theory explains aboutness in

⁸ In the sense that is displayed in Frege’s puzzles on thought identity (Frege [1892/1997]).

⁹ Sandgren’s motto is: “We are private investigators but public speakers” (Sandgren [2023: 99]).

¹⁰ None of my criticism of Sandgren will aim at this story about contents which is the setup for his autonomist stance. My criticism is directed towards other details of his view and how they are unsuitable as an account of communication, whether or not we were to grant autonomism’s plausibility.

terms of the “agents’ beliefs about what it would take for attitudes to be about the putative target” (Sandgren [2019: 3685]). It is thus meta-representational given the appeal to the second-order beliefs the agent has about her first-order beliefs. These second-order beliefs are reflected in some of the agent’s *dispositions* to judge whether some other belief is about the same target; they need not be occurrent beliefs.

The core insight of the theory is that these second-order beliefs lay down *triangulation conditions*, which are then utilised as the standard by which to measure whether the relation of co-aboutness is obtained or not. Given two token beliefs, A and B, we determine their co-intentionality *via* a triangulation condition, in the following way: “For any token belief B, if **B is such and such**, then belief B is about the same thing as belief A” [*Ibid*: 3686]; the bold part states the triangulation condition extracted from or laid down by belief A. Crucially, there is significant leeway here. Triangulation conditions may reflect the causal origin of a belief (shared perception of an object being a paradigmatic case), or they may instead capture the objects of belief descriptively (if the object being thought about fulfils some predicate for both subjects).

To illustrate how the view is supposed to work, take, for example, a case of joint attention: John and Mary are both attending to a puppy in the street. John forms the belief ‘The puppy looks like Frege’ (call this belief ‘A’), while Mary forms the belief ‘The puppy looks like Russell’ (call this one, ‘B’). John has the disposition to judge that a belief generated in virtue of visually attending to that dog will be about it. It therefore lays down the following triangulation condition: for any belief B, if B is formed by visually attending to the puppy, then belief B is about the same thing as his belief A. Mary’s belief B satisfies that condition, as it also comes from her visually attending to that dog, which ultimately makes it about the same object as John’s belief.¹¹ These conditions are designed to capture the fact that a representation *targets* the same as another when it has been formed in a sufficiently similar way, or represents the same target in a sufficiently similar fashion, a fact to which the agents involved might be disposed to attest. Triangulation occurs through the fulfilment of a conditional that contains some description of the objects of the relevant first-order belief, or a description of the way said belief is formed. Crucially, in Sandgren’s account, it is enough that beliefs meet *at least* one triangulation condition for them to be

¹¹ Another of John’s meta-representations could lay down a triangulation condition satisfied cross-modally, such as a condition that stipulates that a belief generated by listening to the puppy’s bark is also about the same thing as his belief A. A descriptive triangulation condition could be: any belief about the puppy owned by Susan is about the same as John’s belief A.

co-intentional.

4 Triangulation and communication

While Sandgren's presentation of autonomism doesn't include a detailed specification of how exactly the triangulation mechanism applies as an account of communicative success, we may naturally extend the triangulation framework to cover it. Triangulation theory receives much of its motivation from accounts of intentional identity.

Such accounts centre around attitude reports that include pairs of beliefs with a common focus, of the form "S believes that *x* is F, and P believes *it* (the same *x*) is G". Sandgren too builds his framework with this sort of attitude report in mind. But, more particularly, he designs it to appropriately uphold our intuitions on certain asymmetries involved in Edelberg-style cases of intentional identity.¹² In these cases, subjects may diverge in whether they take their beliefs to have a common focus or not.

For instance, imagine two detectives together investigating a 10am murder. They both agree on who they believe did it, but at 12pm another murder occurs. Now, they disagree: Detective₁ thinks that the same individual committed both murders, while Detective₂ believes they were committed by two different individuals. In such a scenario, belief report A would be appear to be true, while report B, false:

- (A) Detective₂ believes an individual committed the 10am murder, and Detective₁ believes *they* (the same individual) committed the 12pm murder.
- (B) Detective₁ believes an individual committed the 12pm murder, and Detective₂ believes *they* (the same individual) committed the 10am murder.

To accommodate these intuitions of asymmetry, Sandgren's framework comes with the built-in feature that order of appearance in the belief reports (as revealed by the position of the italicised, anaphoric pronoun) determines which subject's triangulation conditions to take

¹² See Sandgren [2019] for a more detailed illustration of the triangulation theory's application to these cases of intentional identity. The cases central to the debate over intentional identity can be traced back to Geach [1967], and the asymmetry-involving cases can be found in Edelberg [1986, 1992].

as central, and to which other subject's beliefs must match.¹³ However, it should be obvious upon reflection that communication is not to be modelled along these highly subjective lines. It is highly questionable that matters of communicative success can be settled according to which subject's perspective we take (the speaker or the hearer's, or relative to one hearer but not another). Still, a more natural understanding of communication as an instance of intentional identity is available through reports of the form 'S and P both believe *x* is *G*', in which *both subjects* (and their respective triangulation conditions) take centre stage. In these kinds of cases, and as Sandgren actually allows, we may run the triangulation test in both directions: we see to it that S's belief matches (at least one of) P's belief's triangulation conditions and, at the same time, that P's belief matches (at least one of) S's belief's triangulation conditions. If there is indeed such a two-way match, the beliefs are co-intentional and communication would more plausibly result in success. This would seemingly evade the problematic asymmetry inherent to non-communicative cases of intentional identity.

This amendment, however, is not enough. What might work for intentional identity in general will not do for communication in particular. Here's why: as just stated, triangulation theory necessitates only that a given belief matches *at least one* of the other belief's triangulation conditions for it to be co-intentional with it. Nothing seems to really be gained by subjects matching *more* triangulation conditions, this would seem to have no impact on the success status of a communicative exchange. The guiding idea here might be that matching one condition already gets subjects' beliefs hooked onto the right objects. However, communicating about the same objects in such a minimal sense just won't cut it. Importantly, the framework so conceived says nothing about *how* subjects must think of these objects if communication is to be successful. This is, I believe, reminiscent of Loar's [1976] well known point that securing reference is not enough for successful communication,¹⁴ as this leaves out potentially significant differences in the subjects' cognitive perspectives on the objects they are attempting to communicate about. In many cases, these differences would render communication unsuccessful where—under the one-condition matching criterion—the triangulation theory would diagnose success even in cases of (huge)

¹³ In the skeleton report above, we would focus on P's triangulation conditions, and see whether S's belief that *x* is *F*, matches any of S's conditions. In report A, we would focus on Detective₁'s triangulation conditions; Detective₂'s belief would match them. In contrast, in report B we look to Detective₂'s triangulation conditions, which Detective₁'s belief would not meet.

¹⁴ See also Heck [1995] and Paul [1999] for insistence on this point.

variation of cognitive perspective.

This problem is especially salient in cases where subjects might lay down very flexible or non-standard triangulation conditions for their beliefs. Sandgren in fact believes that it is important to be able to capture such flexibility, as we need to be able to take into account the subject's own perspective when deciding on whether they are thinking about the same things as other subjects. To see why, suppose (an imagined version of) the philosopher Spinoza believing all the things in the world to be identical to God. In this case, for Spinoza to triangulate his thoughts with someone else's, it is merely sufficient that that subject's thoughts be about anything at all in the world,¹⁵ given Spinoza's extremely flexible triangulation conditions. Nothing else needs be taken into account, no other features of the other subject's thoughts, for determining whether they are co-intentional with Spinoza's.

Sandgren takes this to illustrate a positive aspect of the account; specifically, the fact that it can explain why the belief report "Jill thinks her dog is ill, Spinoza believes that it (the same thing) is wonderful" would ring true to us, while the inverse "Spinoza thinks God is wonderful, Jill believes it (the same thing) is ill" would instead ring false. While this may be helpful in the context of determining the co-aboutness in the debate over intentional identity, it is hard to see how this is of any help in assessing the success of communicative exchanges. In fact, this is deeply problematic: the asymmetries that a theory of intentional identity must appropriately account for should not carry over into any account of communication.

Imagine Spinoza attempting to communicate about cats with some ordinary subject, Norm, who takes things to be as they ordinarily are. In particular, suppose that Spinoza communicates to Norm his own belief that cats are wonderful. Unfortunately, because of bad hearing or some environmental factor, Norm comes to believe that caps are beautiful. Given Spinoza's extremely generous triangulation conditions, the latter can easily have a belief that is co-intentional with Spinoza's,¹⁶ and the triangulation theory would deliver the verdict that the exchange was successful. But it seems to me that we wouldn't think so. For Spinoza, let's not forget, everything is identical to God, and cats in particular are as well (and are wonderful for exactly this reason). But none of this would be apparent to Norm.

¹⁵ This case is taken directly from Sandgren's own discussion of the view. For details on how triangulation theory applies to the case (and an opposite case of strict triangulation conditions) (Sandgren [2019: 3690–1]).

¹⁶ We can safely assume that Spinoza is also capable of triangulating on the hearer subject's belief (which would intuitively lay down very ordinary triangulation conditions), in order to guarantee bilateral matching of (at least one) triangulation condition.

He forms the ordinary, but distinct belief that caps are wonderful. Although the theory diagnoses that their beliefs are co-intentional, that there is in fact sameness of aboutness, the subjects end up entertaining beliefs that are radically different to one another. To all intents and purposes, they are not communicating successfully, although an unrestricted triangulation framework would conclude otherwise. Other cases (closer to Loar's original considerations) can be built to reach the same conclusion: that allowing co-aboutness to obtain by matching only one, or too few conditions opens up space for radically differing conceptions incompatible with successful communication.

As it stands, therefore, the triangulation theory delivers verdicts of successful communication where there is no such thing, where the subjects' perspectives or understandings on the subject matter of conversation may be completely uncoordinated, simply too different. In a sense, the approach falls victim to an exact opposite form of the original mismatch problem. In this case, the conditions for successful communication are too lax. Defined in this way, sameness of aboutness is not able to capture the necessary likeness that subjects' understandings of the subject matter at hand must have if they are to communicate successfully. There is too much possible asymmetry, or not enough in common in how the subjects must conceive of the objects they communicate about, thus rendering communication unsuccessful, as the expected mismatch effectively makes understanding impossible.

This, together with considerations surrounding the original mismatch problem, leads me to draw the following moral: that the existence of content mismatch must constrain any account of communication in two oppositely pulling directions. While there may be acceptable differences in subjects' understandings of the subject matter at hand, as highlighted by the original mismatch problem, there is a limit to how much there can be, or understanding will simply become misunderstanding, as shown by the above converse mismatch problem. What we need is an account of communication situated in a middle ground between those two poles, an account that delivers a criterion of successful communication that is not as lax as the autonomist's sameness of aboutness (or the more well-known sameness of reference), but not as strict as the standard view's sameness of content of the sort discussed in section 2.

I think a triangulation theory directed towards meeting these desiderata is feasible, but, before I present it in section 6, there is a more fundamental problem with Sandgren's core notion of aboutness that needs to be tackled.

5 A lack of content

As we've seen, in order to avoid the problem raised by content mismatch in the account of communication, Sandgren has provided a framework—the triangulation theory—to explain exactly how the aboutness of a belief is to be captured. While such a framework would need to consider the points about asymmetry considered above, I take the account to also be problematic in its abandonment of content. For, as noted, aboutness on Sandgren's interpretation is a content-independent notion.

According to Sandgren, the autonomist—who fully recognises the autonomous character of linguistic and belief content—“can plausibly deny that the aboutness of a representation is a kind of content (or determines a kind of content)” ([2023: 104]). The idea is meant to overcome predictable differences in the content of the speakers' beliefs:

Suppose the content of the belief expressed by the speaker and the belief formed by the audience have different contents (and that there is no discrete element of content in common across those beliefs). They may yet be communicating if the beliefs are about the same things. When I say 'Bronwyn is in her office' and you form a belief on the basis of what I said, we could say that the communicative interaction is successful only when the belief expressed and the belief formed are about the same things. [Sandgren 2023: 106]

However, while initially appealing, the key notion of aboutness necessarily leads us into trouble when characterised meta-representationally, by way of the triangulation theory in the way made clear above (§3). To see this, let's assume for a moment that aboutness can indeed be defined in this meta-representational way; that is, by appeal to higher-order beliefs. Then, of any second-order belief that is invoked to account for the first-order belief's aboutness, we may ask the following question: what must the account say about *this* belief's aboutness? As with any of the subject's attitudes, this belief will involve objects and properties of its own, and so must involve some aboutness of their own. What can the triangulation theory say regarding the aboutness of any of these higher-order beliefs?

It seems as though we are faced with a vexing dilemma, with no attractive option on either horn. On one horn, if we are to find some other (even) higher-order belief to capture its aboutness, as the triangulation theory would naturally seem to suggest, we will inevitably be launching into an infinite regress. I take it that this is a non-starter; it's hard to see how we may indefinitely go on appealing to further, distinct beliefs to characterise the aboutness of all prior ones. If, on the other hand, we appeal to some belief we have already

appealed to at some point in the chain, we have a disturbing circularity.¹⁷

One might argue for settling on this horn by claiming some sort of holistic nature for aboutness. If holism is a live possibility—as I actually will contend it is—one might wonder why the autonomist is not licensed to take the second horn of the dilemma. The reason is that, according to autonomism, and as we have seen, the aboutness relation is to be sharply distinguished from any content relation. It follows that the circularity will directly concern content-independent properties or structures of our beliefs, and it is just hard to see what those properties or structures could be and why we should conceive of them in holistic terms. After all, the examples of conditions determining aboutness—such as being the result of visually attending to an object (as in our example in section 3) or being caused by a particular property (as suggested in Sandgren’s quoted example)—do not seem to be the kind of thing to which holism would naturally apply. By contrast, we do seem to have an intuitive grasp of what triangulation conditions would amount to if they were to concern content relations. In this case, however, triangulation would boil down to individuating aboutness in terms of their holistically construed contents.

If I am right, the content-neglecting account of communicative success based on triangulation theory is self-defeating, and the autonomist might have provided us with an intractable notion in this context. Bereft of a functioning alternative, it appears as though we would be better off by returning to a content-based explanation. Indeed, elimination of content is not a forced choice if we hope to give an adequate answer to the mismatch problem of communication. This is also true if we essay a response based on the idea of triangulation.

The mismatch problem and the associated autonomism at most precludes us from holding a *sameness* relation of content to explain communicative success. As I mentioned earlier, there is a natural alternative on the market: developing a view based on content similarity.¹⁸ If views of this kind can enjoy a good reputation as an alternative to sameness accounts, it would seem that the motivation for the autonomist’s elimination of content

¹⁷ Readers familiar with the literature on phenomenal consciousness and Higher-Order Thought (HOT) theories might recognise this argumentative strategy against views that define a property of an object or state by positing a further something of the same kind. Rowlands [2001] mounts an argument against HOT theories (Rosenthal [1986]) by claiming that defining a conscious thought in terms of another, higher order thought targeted at the first incurs in a dilemma of the kind I’ve presented here, between a disturbing circularity and a no less disturbing infinite regress.

¹⁸ A few examples include Churchland [1986, 1998], Pagin [2020], Pollock [2021], Schroeder [2007].

from the picture is severely undermined. Taking the content-similarity road in their account of communication seems like the obvious choice for those whose overall theory of mental content and/or meaning naturally entail the existence of a mismatch between speakers' mental and/or linguistic content.

This is the situation that many approaches which posit fine-grained, or narrow content faces, as this type of content is typically associated with a high degree of variability from subject to subject. Some take this to be a curse (Fodor & Lepore [1992]), while others a blessing (Pollock [2015, 2025]). These views are, in effect, upholding the moral of the mismatch problem I drew earlier: when giving an account of successful communication, one must accommodate for these differences in contents, perspectives, or understandings as a desiderata of their account. Yet when viewed from the angle of triangulation theory, distinctive solutions might be in view. My aim in the next section is to sketch out how the meta-representational approach in terms of triangulation conditions could begin to be articulated as a content similarity view of communication, in opposition to the content-neglecting version just discussed. In doing so, my construal will circumvent the two main problems highlighted above: first, the failure to deliver correct verdicts of successful communication, owing to the faulty or insufficient mechanism of the one-triangulation-condition matching sort; second, the replacement of content in favour of a content-independent notion of aboutness which, given its characterisation, landed us in a dilemma.

6 Triangulating on similar content

While its particular autonomist implementation seems problematic, the meta-representational strategy might still be seen as giving a promising solution to the mismatch problem in accounting for communicative success. Situations of mismatch presented above, I submit, can be cashed out in terms of subjects holding relevantly different beliefs about the conversational subject matter. In cases of conceptual variability (such as that of Dutch speakers' varying application of the concept *arm*), the subjects hold diverging beliefs about what exactly falls under the extension of the concept. Similarly, shedding light on the underdetermination at the heart of Buchanan's case (and the mismatch that arises as a result) would require looking into the communicating subjects' further beliefs in order to identify how each is understanding the referent of the relevant contextually sensitive expression. These considerations are in line with many remarks made by proponents of various forms of holism, for whose accounts some meta-representational component is integral. Davidson, for instance, captures a foundational idea shared by holistic approaches when he claims that

“a belief is identified by its location in a pattern of beliefs; it is this pattern that determines the subject matter of the belief, what the belief is about” (Davidson [1975: 168]).

Against the content-neglecting approach, then, I propose that we refocus the triangulation mechanism to determine a *relation* holding between communicating subjects’ mental contents. More precisely, triangulation will help reveal the *degree of similarity* between the contents subjects entertain after a communicative episode. The core idea is that the more of these (meta-)beliefs that speakers share about the contents of their respective first order beliefs being communicated, the higher the degree of similarity between these contents. The degree of similarity is therefore a function of the overlap between triangulating beliefs possessed by the communicating subjects. For instance, let’s go back to Majid’s case involving the deployment of the concept ARM in the Dutch linguistic community. Suppose a speaker utters ‘I had to keep my arm in a cast for two weeks after the accident’. Communicating subjects who differ in whether the arm includes the hand or not might still share very relevant beliefs about where arms are located in relation to other body parts, that they are upper-body joints, that they begin at the shoulder, etc. To the extent that (many of) these beliefs are shared, contents with regard to the utterance will be similar enough, and a hearer can be said to have understood the utterance.

The key of the meta-representational approach is that it allows us to capture the most fundamental aspect of communicative success: what sharing (similar) contents has to do with mutual understanding. Identical contents of the sort relied upon by standard approaches would naturally entail an absolute shared understanding between speakers; it shouldn’t occur that subjects who come to entertain the exact same thought, post-communication do not thoroughly understand each other.¹⁹ But, given the pervading mismatch of contents in all of its forms, it is hardly the case there is such completely shared understanding.

We may, however, get along with this weaker degree of similar understanding. The triangulation framework I sketch here provides us with a way of comparing communicating subjects’ understanding of their own contents. The set of triangulation conditions that are laid down for a given belief, in virtue of being the subject’s thoughts about that thought (the objects and properties contained therein), about its content, are to be seen as capturing what Pollock has called ‘subject-sensitive understanding’.

¹⁹ This is far from obvious, however. In fact, that content and understanding can come apart seems to be at the heart of the social externalist’s thesis of ‘partial understanding’ (Burge [1979]). Internalists such as Wikforss [2006] and Pollock [2015] have weaponised this feature against the view in various ways.

[This kind of understanding] tracks a subject's cognitive perspective on the content of her thoughts. [...] [H]ow a subject is disposed to employ content in her reasoning. [...] [T]he inferential relations between contents, and the conceptual relations between concepts. [2015: 3233]

I suggest that this is precisely what the meta-representational approach of the triangulation framework can afford us. That the degree of similar contents is determined by the overlap in triangulation conditions straightforwardly illustrates how similarly subjects would track the contents they communicate about in their own reasoning, what inferences they might draw, what concepts they deploy, etc.²⁰ Furthermore, it is this sort of coordinated understanding that plausibly explains interlocutors fulfilling whatever practical aim the speaker intended to express in the act of communication, reflecting the intimate connection between belief and action. Episodes of successful communication normally (but not always) involve, and are marked by, this sort of fulfilment of practical aims. Unsuccessful communication can, inversely, often be explained by failures to fulfil the speaker's practical aim(s), in turn due to a failure in correctly understanding the content of her utterance(s), which will further yet be accounted for by attributing false (or relevantly different) beliefs to the hearer. This disparity in beliefs precludes the possibility of correctly triangulating on the speaker's own content, and it is ultimately because of this that misunderstandings occur, and communication fails.

It is easy to see how, articulated like so, the approach avoids the asymmetry objection: by not requiring a one-condition match benchmark, we take into account a relevantly broader part of the communicating subject's perspectives on the subject matter. This allows us to draw the correct verdicts of success and failure, where simpler articulations homing on content-independent aboutness could not. In the case considered in section 4, there is simply not enough overlap between Spinoza's and Norm's triangulation conditions for there to be a similar enough understanding to ground successful communication. Nowhere in Norm's triangulation conditions (in his understanding of cats, caps and their properties) is there any reference to God, nor the belief that all existing objects are identical; triangulation conditions that would otherwise seem crucial for identifying Spinoza's understanding of his contents.

²⁰ See Drobnák [2022, 2025] for another similarity proposal very much in the spirit of the account laid out here, but articulated in terms of the inferentialist framework. I am grateful to an anonymous reviewer for the observation.

In a similar vein to Davidson's idea that, in interpretation, false beliefs "tend to undermine the identification of the subject matter" (Davidson [1975: 168]) *for a subject*, differences across subjects' beliefs will also undermine identification of a *shared* subject matter in communication. This vindicates a shared intuition in holistic frameworks that in determining content and meaning, the focus must be on invariance across beliefs. In Davidson's own triangulation framework (Davidson, [1991]), invariance is the key to overcoming underdetermination in the assignment of meaning to speakers. Bilgrami [1987] appeals also to invariance in saving from criticism that he cannot distinguish change of meaning from change of belief for a subject (this is one charge of Fodor & Lepore's [1992] instability thesis attack). Concepts and meanings will be determined precisely by the beliefs that are constant or invariant in the face of theory change, or changes in the subject's wider network of beliefs. In line with this strategy, I am proposing that communicative success be determined by what is invariant or common across the subjects' respective sets of triangulating beliefs.

One may pause to address scepticism on this point. Let's grant that the relation of similarity between the content of two (or more) subjects' first-order beliefs is determined by the overlap or matching of their meta-beliefs. What exactly is the connection between a meta-belief and its respective first-order belief? Does it *determine* the content of the first-order belief? If so, there seems to be a structurally analogous dilemma to the one I presented against the content-neglecting version of triangulation theory (§5), as one may reasonably enquire about the content of the second-order beliefs themselves. If meta-beliefs do *not* determine the content of the first-order beliefs, what does? And, relatedly, how does the triangulation framework fit into that story, exactly? There are a few options open to the triangulation theorist.²¹

The first should be obvious enough already, which is for triangulation to embrace its seemingly holistic nature. It would therefore avoid the dilemma by embracing its second horn, taking seriously the idea that belief content is individuated (partly, or fully) on the basis of other beliefs and their contents. Holism has historically had its detractors, which might be cause for worry for anyone enthusiastic about the triangulation theory I lay out here. One notable challenge to the view has been that of the 'instability thesis', as posed by Fodor & Lepore [1992]. There are, however, many attempts in the literature to handle said challenge, such as the moderate or externalist holisms of Bilgrami [1992], or Jackman [1999].

²¹ I outline the possibilities briefly. A full elucidation of the triangulation framework is out of the scope here, but I plan to pursue the project in future work.

There are even recent exercises in overcoming the challenge for *radical* versions of holism, all the while showing how they may accommodate for the kind of conceptual similarity we are interested in here (Pollock [2020]). Triangulation theory can certainly benefit from engaging with these views.

A second way in which triangulation's appeal to meta-beliefs might be said to participate in the determination of content is by encapsulating some sophisticated notion of Fregean sense. Triangulation conditions may, I believe, help capture both the more classical descriptivist version of sense (Frege [1892/1952]), as well as Evans' [1982] neo-Fregean, causal or information-based take on sense. As was mentioned above, triangulation conditions may reflect the causal origin of the object of belief, or it may capture it *via* a definite description. There are also other Fregean-based similarity proposals out there, which would seem amenable to the triangulation framework. Bezuidenhout [1997], following Recanati [1993], and as a response to indexically motivated propositional mismatch, proposes a distinction between *linguistic* and *psychological* modes of presentation. The first are akin to Kaplanian characters or conventional meanings, helping determine reference in a context, and are intersubjectively available.²² The latter, psychological modes of presentation are, on the other hand, subjective, characterising the subjects' (differing) cognitive perspectives on the subject matter at hand. However, *pace* Recanati, for Bezuidenhout they are not incommunicable. Communication will be successful to the degree that the speakers' psychological modes of presentation are similar to one another. Meta-beliefs seem like the right sort of thing to constitute or reflect a subject's psychological modes of presentation, as they reflect the cognitive significance that the objects of conversation have for them.

The triangulation theorist can, however, also claim that triangulation does not determine content. Instead, they can avoid the dilemma by adhering to some pre-existing theory of content. Content, for instance, might merely be referential content, as Russellians would claim. But referential content has been shown to be defective in order to account for communicative success in certain scenarios (Loar [1976]). For this reason, neo-Russellians have begun speaking of some further "transactional requirements" along with referential identity, to account for communication (Goodman [2025]; Onofri [2019]). Triangulation could therefore be seen as filling in for these transactional requirements. Instead of determining a relation between contents—for referential content the only re-

²² But the sharing of which is not enough to sustain communicative success. See the point on Loar cases in section 4 above.

lation is identity—triangulation might instead deliver a degree of similarity in subjects' understandings.²³ An interesting distinction might be that between *referential* success and *conceptual* success, where triangulation captures the latter without thereby undermining the importance of the former (in non-problem cases like Loar's). Communication is therefore successful when speakers refer to the same thing, and share enough of a core set of beliefs about the first order content's subject matter. Triangulation is more properly understood as a pragmatic tool, rather than an essential part of semantic content/meaning. Reference remains primary, but additional triangulation conditions ensure mutual understanding. Admittedly, this is less of a content-involving story as I had declared from the outset. However, it is not content-neglecting in the sense that Sandgren's is, where mental and linguistic contents are displaced from the picture altogether. It still gives (referential) content its rightful place in the account, and delivers a complementary mechanism to help determine the measure of communicative success.

7 Concluding remarks

Beginning with the very simple but compelling idea that a communicative exchange is a matter of subjects entertaining the same thoughts or contents as a result of it, we quickly come to the realisation that not all that glitters is gold, and that this standard or naïve picture of communication certainly is not. The truth of the matter is that we have strong reasons to believe that there will in fact tend to occur many a mismatch regarding the contents subjects hold in the context of successful communication. We have reasons to suspect that subjects tend to have (quite) different cognitive perspectives on the things being talked about, or similarly that whatever is communicated tends to come underdetermined, and hard (if not impossible) to grasp exactly. I have dubbed this worrying situation the mismatch problem.

Taking seriously the issue raised by this problem forces us to reevaluate our criterion of successful communication. While one can find several options on the market, here I have restricted attention to a promising, yet so far largely unattended proposal: triangulation theory. In the light of the mismatch problem, some have found appeal in articulating this possibility by eliminating content from the picture. In this paper I have argued against this content-neglecting strategy, as articulated in the ambitious autonomist project championed

²³ Now understood as being independent of content, as per some externalist approaches (see fn 19).

by Alexander Sandgren. I have shown that his attempt to replace content with another notion—aboutness—is though natural, ultimately unsuccessful: on the one hand, I have argued that the autonomist fails to capture fundamental aspects of the subject's cognitive perspective at play in communicative exchanges and, on the other, that characterising the nature of this aboutness in meta-representational terms ultimately leads to an insurmountable dilemma. However, we may draw on basic tenets of the meta-representational approach to set out an attractive account of communication that takes content as central whilst doing justice to the mismatch problem, thereby taking away any motivation in doing away with content altogether.

I have attempted to sketch out an account in this direction, reworking the triangulation framework's meta-representational approach as a criterion for content similarity. To do this, the triangulation framework must drop the one-triangulation-condition-match requirement. This feature rendered Sandgren's theory too poor, essentially landing it in the clutches of a revamped mismatch problem, whereby in attempting to make room for mismatch it allowed for too much of it. The triangulation framework offered here as an alternative takes a continuous matching of subjects' meta-representational beliefs to deliver said measure of similarity. This account of similarity-based communication provides crucial insight into the role of content in communication and what it means for subjects to coordinate their understandings or perspectives in communicative exchanges: the degree of overlap in triangulation conditions indicates the degree of similarity, necessary for successful communication, as well as the way subjects would deploy the contents of their thoughts in reasoning about the subject matter that is at stake. The triangulation framework I lay out here can promisingly be taken in various directions, allowing the incorporation of elements from such other frameworks as holism, Russellianism, or Fregeanism.

This discussion leaves open some further points of inquiry which must, for now, unfortunately remain so. For example, one thing to do would be to provide a more in depth characterisation of the precise mechanisms by which overlap of triangulation conditions is to determine similarity of content. More concretely, what determines which relevant conditions, of a subject's whole belief network, are to be matched in order for communication to be successful? We can posit contextual restrictions here as a means of delineating relevant triangulation conditions. The meta-beliefs we invoke could, for example, be restricted by their relevance in answering the question under discussion that is guiding the communicative episode (Schoubye & Stokke [2016]). It also raises a question about the very nature of linguistic understanding. It might well be that communication as content similarity goes hand in hand with a graded notion of communicative success. If similarity of content is

determined by overlap in meta-representational beliefs and, as we have seen, subjects can naturally share more or less of them, linguistic understanding and communicative success might itself come in degrees. There are proposals in the literature that share in this idea (Bezuidenhout [1997]), as well as proposals to disambiguate this naïve or ideal notion of communication (as sharing of contents) into a variety of “communication-like” phenomena that might require less than a precise share in contents (Abreu Zavaleta [2021a]).

While a more rigorous treatment of these and other issues will need to await further work, I take the foregoing to highlight the potential that the triangulation framework holds as an adequate treatment of communicative success in the light of content mismatch, once content is kept firmly in view.²⁴

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