

# ON VISUAL COHERENCE AND VISUAL EXCESS

Writing, Diagrams, and Anthropological Form

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**Abstract:** This article reflects on the power and dangers of diagrams as a mode of anthropological exposition, comparing this particular form of non-text to the brief dalliance of mid-century anthropology with algebraic and logical formulae. It has been claimed that diagrams, like formulae, are clearer, simpler, or less deceptive than textual argument. By contrast, this article argues that diagrams are just as slippery and tricky as words, but that images and words slip and slide in different ways. Holding both diagrams and words together when building an argument enables not only a specific kind of rigor, but also moments of unexpected theoretical invention. This technique of holding together contrasting heuristics scales up as a productive epistemic device for anthropology more broadly.

**Keywords:** anthropology, coherence, comparison, diagrams, excess, form

Unlike some of the other contributions in this special issue, this one is written primarily from a practitioner's point of view. Parts of it might even be labeled 'confessions of a budding diagrammatist'. But there is a broader aim here: the article explores anthropological diagramming as an entry point into questions about form and formalism in anthropological knowledge production. I will examine some of the critiques against and uneasiness with the use of diagrams in anthropology and examine the recurrent (counter-)claim that diagrams and other kinds of formal representation—including anthropology's very brief love affair with algebra—are useful because they clarify, reduce, and act as a productive limit on the proliferation of verbal arguments. Although this claim is persuasive in some respects, it is also partial. I argue below that diagrams and other formalisms can also suggest new possibilities and vistas, to which



the accompanying text in turn acts as a productive limit. In sum, this article makes an argument for the value of formalism in anthropological knowledge production, while seeking to expand our understanding of how formalism might be valuable.

Alongside analyses of some historical uses of anthropological diagrams, the article draws on a reflexive examination of trials and errors in my own recent attempt to use diagrams to build an argument about anthropological comparison (Candea 2018). The topic of that book is in principle incidental—any diagrammatic argument would have served as an example, the main point being merely to unpick stages and moments in the process of articulating pictures to words and vice versa. However, I will argue in the conclusion below that these two themes (diagrams and comparison) are not randomly connected. This article's core argument is that diagrams are productive because they strain against the text they accompany. This is also in essence the book's argument about the way anthropological comparisons keep the discipline together, that is, precisely through its internal tensions—an argument developed partly through diagrams, as I will outline below. On both scales, this is a story about a particular epistemic device: formalism as a means for fostering internal multiplicity.

## **Back to the Drawing Board?**

Diagrams are back. Once a mainstay of anthropological exposition, diagrams fell out of favor in the 1980s and 1990s in part as a result of the 'literary turn'. Writing in the late 1990s, Alfred Gell (1999: 31) described it as "a moment of verbalism, in which the graphic impulse is checked on ideological grounds, because graphics are associated with science, high-tech and particularly, engineering [which] is from the standpoint of the cultural studies mindset, Disciplinary Enemy No 1." Now, however, diagrams seem to be making a comeback in some quarters. Gell's own 'Strathernogram' was an early trailblazer. Bruno Latour's profuse use of diagrams in various works (see, e.g., Latour 1993, 2004) has become a key device also for the exposition of his ideas by others. No university lecture on actor-network theory is complete without one or another of Latour's diagrams being presented to an initially puzzled audience. Eduardo Viveiros de Castro (2001), Martin Holbraad, and Morten Axel Pedersen (Holbraad 2012; Holbraad and Pedersen 2009) have used diagrams not simply as illustrations, but as key steps in arguments. The purely 'trendy' aspect of anthropology's spat with diagrams might thus seem to be at an end. Right now it is the literary turn that is fashionably being shunned, so it is perhaps not surprising that ideological strictures against the 'graphic impulse' have loosened.

And yet there is continuing unease with diagrams in some quarters. These are not viewed in a matter-of-course way as they were in the mid-twentieth

century. Those who cede regularly to the graphic impulse tend to attract amused comments and asides from colleagues and simply brush off rebuttals such as “diagrams just don’t do anything for me.” Few are the contemporary anthropological diagrammatists who do not perform the art with a measure of flamboyant self-consciousness and/or a pinch of tongue-in-cheek.

At least two widely stated and fundamentally solid objections to the use of diagrams in contemporary anthropology are not just about intellectual trends. The first is the thought that diagrams often add little to the text they accompany. Since they typically require explanation, why not simply provide the explanation? As Barnes (1962: 406) once wrote of the brief love affair with algebraic formulae in anthropology, “plain English is easier to understand and cheaper to print.” A stronger version of this critique focuses not simply on the claim that diagrams add nothing, but points furthermore to what diagrams take away. Ingold (2000: 140) has criticized kinship diagrams’ “decontextualizing linearity.” As Partridge (2014) reports in a wide-ranging review of anthropological diagramming, a number of critics feel that diagrammatic representation “threatens to conceptualise social relations as static social facts rather than as ‘dynamic phenomena,’ offering a particularly empty conception of social life.” In sum, diagrams, through their very form, are sometimes felt to leech away context, time, dynamism, and life itself.

The second objection is most clearly stated in an observation that Gell (1999: 31) attributed to Marilyn Strathern, according to which “diagrams can give a spurious logic to texts which are, in fact, discursively incoherent.” This charge echoes another widespread discomfort about diagrams, which centers on the claim that they lend a spurious authority to the text. Historians of the discipline have noted that early anthropological uses of diagrams such as Rivers’s genealogical charts were self-conscious attempts to establish anthropology as a positivist scientific enterprise on a par with other sciences (Bouquet 1996), and those desires persist in some quarters. More recent diagrammatists might be suspected instead of trying to appear to be not as boring as biologists, but rather as highfalutin as philosophers.

Yet as Partridge (2014) notes, there are many kinds of anthropological diagrams, and they have been used to many ends and purposes. Not all seek positivist reduction—some, on the contrary, try to expand the interpretive reach of the text they accompany. And the precise kind of authority they seek or achieve depends very much on context. One might say, with Partridge, that “questions around how diagrams are used in anthropology are as numerous as the forms they adopt” (ibid.). I will, however, try to say something a bit more specific than that.

But first let me be clear about what this article will not be attempting. A proper historical exploration of diagramming in anthropology would need to take into account the many institutional, political, and interdisciplinary contexts in which

various kinds of diagramming emerged and spread. It would need to consider diagrams as ‘paper tools’ (Foks 2019) through which the discipline produced various forms of institutional and political effects, both internally and externally. I will not be trying to do anything on that scale here. Rather, this article provides a complementary angle by zooming in, rather myopically, on a seemingly technical question: how do diagrams and text interact within particular anthropological arguments? What exactly do they add or remove? And how might we think about the question of diagrams’ coherence, raised above? In response to the charge that diagrams lend a spurious coherence to texts, Gell (1999) sets out his own goal as that of producing both graphic coherence and textual coherence simultaneously. Yet while we have some sense of what textual coherence looks like, it is not entirely clear what ‘graphic coherence’ means. When is a diagram coherent? And what is it supposed to be coherent with? Itself? How would it not be? The text it accompanies perhaps? But then we are back to the first objection: if a diagram merely recapitulates the text, then why provide the diagram?

I am going to explore these questions in two different ways. As noted above, the first is a kind of auto-ethnography of my recent conversion to diagrams. It reflects on the process of building a book-length argument through, with, and alongside what Gell (1999) terms a ‘visual channel’. The following sections consider this case alongside others from the anthropological record, to examine some broader questions concerning the distinctive power and limits of visual representation as an anthropological heuristic. Here the article rejoins the key themes explored by other contributors to this special issue, who show, as the editors put it, that “diagrams inhabit a mediating space between representation and prescription, words and images, ideas and things, theory and practice, abstraction and reality.” But my key concern will be to decompose this mediation in order to identify more precisely where and to what effect diagrams accompany, prefigure, and exceed textual forms of anthropological argument. I will focus in particular on the question of how far diagrams borrow from more or less elaborate conventional visual codes, situating this in comparison to anthropology’s short-lived mid-twentieth-century romance with algebraic formulations. These seemingly technical questions of ‘code’ will lead to some broader conclusions about the interplay of invention and convention and the dynamics of graphic coherence within single anthropological arguments and broader disciplinary discussions.

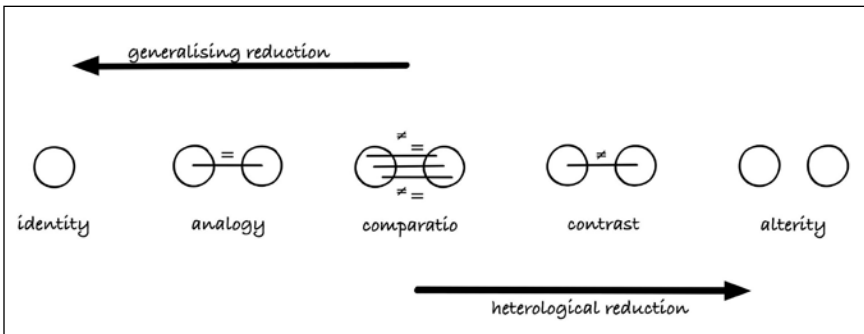
## Thinking through Diagrams

I had for long been doodling out ideas, but had never before actually published a diagram of my own. Yet my book *Comparison in Anthropology* (Candea 2018) carries no fewer than 17 diagrams, suggesting something of the convert’s zeal.

This section describes the way some of these diagrams were devised, and their interrelation with the developing argument of the text. Recounting one's own writing/drawing process in this way might seem a rather self-indulgent thing to do. But crucially, this is not presented as a mastered or particularly elegant process—because it was not. The point of the description, rather, is to pinpoint precisely the contingencies, mistakes, and rethinking that accompany the interweaving of thoughts, words, and pictures in one specific case. Such a decomposition of the writing/drawing process—which only the author can give and which we can only surmise in the case of published works—provides good material for exploring the two questions raised above, namely, that of visual excess (when do diagrams do more than replicate the text?) and that of visual coherence (when do diagrams lend a spurious coherence to an otherwise incoherent discussion?). We shall see that these questions await us at every step of the way.

It all began with figure 1 below, which I first doodled for my own purposes to help me think through the interplay of analogies and contrasts in anthropological comparison. The book at that point was half-written, and various individual arguments were lying there, resisting my attempts to assemble them into a coherent whole. Those concerning the interplay of difference and similarity in anthropological comparison went as follows. First, it has been a recurrent feature of anthropological musings on comparison to draw a stark distinction between comparisons that aim at establishing similarities—often in order to build generalizations—and comparisons that aim at establishing or making difference. These alternatives form a fundamental conceptual but also political and ethical fork in the road for many contemporary anthropologists.

Second, a persistent strand of writing on comparison, from at least John Stuart Mill (1856) onward, has focused on the way in which analogies and contrasts are procedurally interwoven in the building of specific comparisons. Comparisons that point to a key similarity between things otherwise different



**FIGURE 1:** Identity and alterity. Drawn by author. Originally published by Cambridge University Press.

and comparisons that point to differences between things otherwise similar are two classic permutations. But there are many others. Third, and relatedly, there is a fundamental sense in which analogy and contrast are mutually entailed in *any* anthropological comparison. Minimally, even a clear and sustained analogy starts from the point that it operates between two different objects; conversely, any contrast, however stark, involves some preliminary or implicit form of commensuration. Finally, most sustained ethnographic comparisons are more than single contrasts or analogies; rather, they deploy a thick skein of interwoven similarities and contrasts. As an avatar of this thick interweaving of analogies and contrasts, I had struck upon the classic rhetorical figure of *comparatio* (Goyet 2014)—the systematic and slow drawing out of analogies and contrasts between two things, whose most well-known contemporary descendant is the compare and contrast essay.

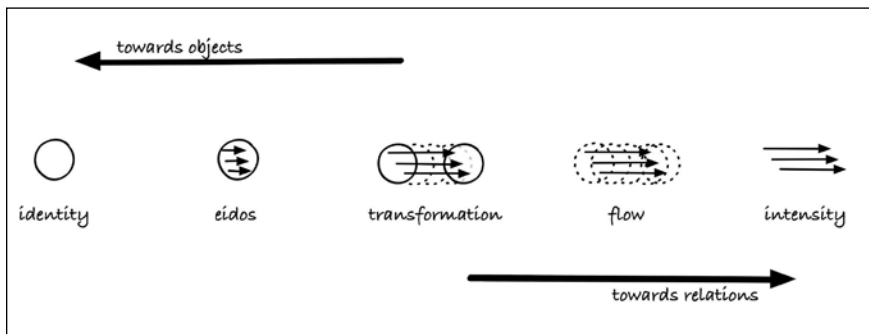
Figure 1 originated as an attempt to visually represent these various arguments alongside one another, to see how they might fit together. Without giving this initial decision much thought, I figured the objects of comparison as circles and the relations made between them as lines, marking some of these relations as analogies by adding = and some as contrasts by adding ≠. This basic visual convention then led to figuring the various terms of the argument above (alterity, identity, *comparatio*, analogy, contrast) as in figure 1—although not, at first, in any particular order.

Placing these individual figures alongside each other made me see the sense in which they came with an implicit order in terms of the ‘thickness’ of relations. At the extremes, both identity and radical alterity marked a non-comparative horizon—there can be no comparison between a thing and itself,<sup>1</sup> just as there can be no comparison by definition between two entities that are completely and utterly different from one another. These horizons are ‘ends’ of comparison, both in the sense that anthropological comparisons usually point toward one or the other, and in the sense that they are the point at which comparison ends, finishes, is extinguished. The thickest comparative interweaving of analogies and contrasts seemed to sit naturally at the midpoint between these two radical horizons. Single analogies and contrasts marked the intermediaries.

In its final form, the diagram represented two arguments that the practice of drawing it had helped me to hone. First, while the aims to which anthropologists put comparison are themselves incommensurable, their actual practices form a disciplinary common ground. Second, there is an inverse relation between the thickness of a comparison and its closeness to its aim, that is, to the ‘point’ it is intended to make. These two arguments are essentially captured in the overall shape of figure 1, with its thick middle of comparative practice weaving together incommensurable thin ends, along which one can travel in both directions to make a point.

These two arguments now formed the bedrock of the book. However, the process of writing it involved the transposition of this basic argumentative and visual form in a number of additional directions. The first such expansion derived in part from a dissatisfaction with my own visual convention of representing objects as closed circles and comparative relations as lines between them. Those circles seemed rather too closed. Are the objects of anthropological comparison really that discrete? Surely a key point of contention among anthropologists concerns the very nature of what we are comparing. Are we comparing things, units, entities in the world, or are we comparing relations, configurations, flows?

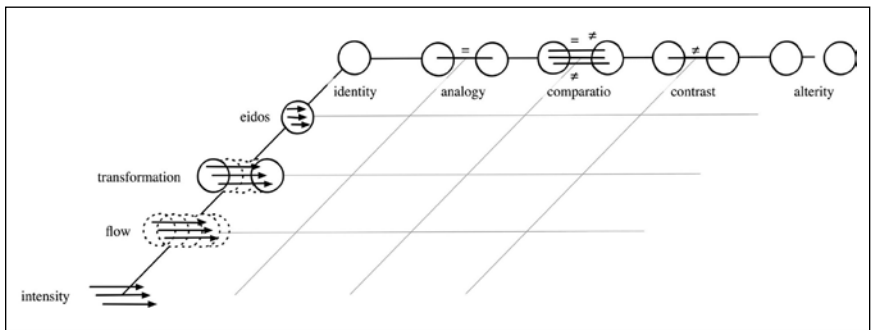
The visual/textual argument developed around figure 1 encouraged me to cast it again as a tension between ‘ends’ or ‘purposes’. The rather otiose meta-physical debate between those who see relations everywhere and those who see entities everywhere becomes more tractable and more interesting when it is figured as a parting of ways between two opposed projects. Is the purpose of comparison that of reducing a confused initial glimpse of flows, states, and relations to a stable vision of identifiable objects, elements, and states? Or is it, on the contrary, to unravel an all-too-easy belief in states and objects into their constituent flows, processes, and relations? This alternative is as stark as that between alterity and identity as aims of comparison. And yet again, in practice, actual anthropological comparisons invoke both objects and relations, both states and flows, both events and processes. The shape of these observations now seemed familiar. They invited a transposition of figure 1 into a new figure 2, in which some initial circles—the unproblematized ‘things’ of figure 1—became evanescent and ‘melted’ into flows and intensities, themselves now figured as arrows. What remained stable was the overall visual form of a thick middle of comparative practice (in which attention was paid to flows, intensities, objects, and transitional states) that thinned out toward two different and incommensurable



**FIGURE 2:** Identity and intensity. Drawn by author. Originally published by Cambridge University Press.

‘ends’: on the one hand, pure identity and its clearly delineated objects and, on the other, pure intensity and a world of flows and perpetual transformation.

Crucially, though, I was not ready to let go of figure 1. Figure 2 mapped out not an improvement of figure 1, but rather a second, parallel problematic. Yet somehow parallelism was not quite what was at stake. How might one represent these two as aspects of the same comparative practice? Putting it like this suddenly made available a new visual possibility that I had not initially envisaged. Figure 1 and figure 2 had one term in common—identity. What if one mapped these two figures as two dimensions of a plane, with identity as their common origin, as in figure 3? At first blush, the move made sense: after all, tensions between similarity and difference and between relations and entities could be applied simultaneously to any single anthropological comparison. The two figures were not describing parallel lines, but rather perpendicular axes of the same problematic (cf. Corsín Jiménez 2011).



**FIGURE 3:** A plane of comparison. Drawn by author. Originally published by Cambridge University Press.

Here, however, more than at any earlier point in the process, the diagram drove the conceptual argument. If, with figure 2, I found myself trying to work out a coherent visual representation of a set of conceptual arguments, now I suddenly had to scramble to draw out the conceptual implications of an enticing visual possibility. What would it mean to imagine comparisons on a plane? Did such an image actually make sense when put into words, and what would be its implications? Was it coherent to combine ‘identity as sameness’ and ‘identity as objecthood’ (self-sameness)? Did the new implication of a ‘coordinate system’, with difference, identity, and intensity as variables, help or hinder an understanding of how comparison actually operates in anthropology? Each of the previous diagrams had highlighted an intricate midpoint of thick comparison—could one imagine a midpoint of these midpoints? Without going into further detail at this point, a reader of *Comparison in Anthropology*

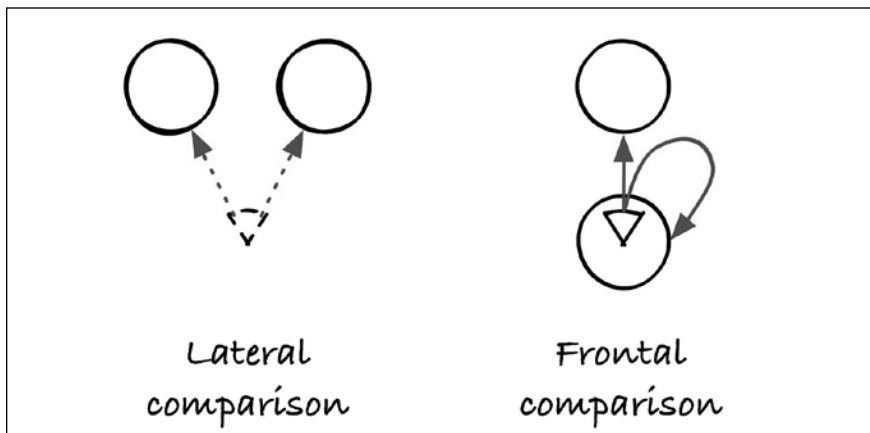


will readily see that some of these questions are addressed explicitly in the resulting text, others implicitly, and others not at all. The diagram exceeds the text in a number of directions.

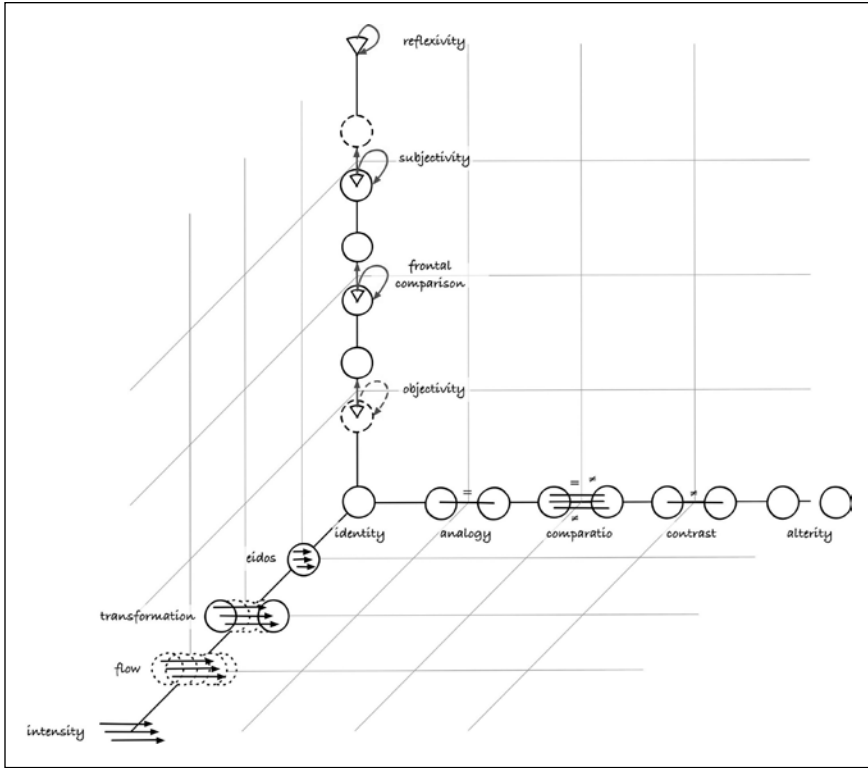
This developing diagrammatic convention begged another fundamental question, however. All of these figures focused on the objects and relations of comparison, but where might the observer be located? Reconsidering those diagrams in light of that conceptual question, they suddenly seemed to carry an blindness to what is probably the most fundamental problematic of most anthropological discussions of comparisons, namely, that of the relationship between observer and observed. This observation about the limits of the diagrams rejoined a distinction I have drawn elsewhere (Candea 2016) between ‘lateral’ comparisons, which focus on the lining up of cases (‘this and that’), and ‘frontal’ comparisons, in which the observer’s own context is one of the terms of the comparison (canonically in anthropology, a comparison between ‘us and them’). All of the diagrams above were essentially about lateral comparison. Introducing the problematic of the observer required another addition to the visual language, as in figure 4.

The multiple permutations of the relationship between observer and observed—the forms and valences of frontal comparison—in turn suggested the necessity of a third axis, turning the two-dimensional plane of comparison in figure 4 into a three-dimensional space, as in figure 5. Without tracing this third axis in any detail, the broader point is that, again, the addition of this third dimension thickened and expanded my initial argument.

In a nutshell, the final core argument of *Comparison in Anthropology* is that anthropologists use comparison in pursuit of divergent if not incommensurable



**FIGURE 4:** Lateral/frontal comparisons. Drawn by author. Originally published by Cambridge University Press.



**FIGURE 5:** A three-dimensional space of comparison. Drawn by author. Originally published by Cambridge University Press.

ends: to generalize from particulars or to challenge generalizations; to unpick purported entities into flows and processes or to identify shared ideals or concrete forms behind disparate processes; to provide accounts of the world as it is or to challenge their own analytical or cultural presuppositions. However, these different ends are all pursued through techniques of comparison that are built out of the same basic building blocks: analogies and contrasts, relations and intensities, objectivities and subjectivities. Combined and recombined, these form intricate heuristic arrangements adequate to the variety of purposes outlined above. While some anthropologists have held up the ‘thickness’ of comparison as an epistemic ideal, the vision of a three-dimensional space also provides a shorthand for imaging what maximal comparative thickness might consist of. A comparison that attends to difference *and* similarity, relations *and* processes, the world *and* the observer’s own situated perspective would sit somewhere in the middle of the space mapped out in figure 5.

This section has illustrated the back-and-forth motion between diagrammatic and textual representation in one anthropological argument. This account

raises two sets of questions that pertain to our initial problematics of visual excess and visual coherence. The first set of questions asks about the ‘translation’ (a problematic metaphor in many ways) of words into pictures and pictures into words. When do diagrams betray the words they sit alongside, and the converse? And if the goal is perfect correspondence between image and text, where does the added value of diagrams lie in relation to the words they accompany? The second set of questions focus on coherence, not between individual diagrams and the text, but across a series of diagrams themselves. What are the value and effects of visual conventions (and visual inventions) in anthropological diagrams, whether these conventions obtain within a single work, as in this example, or in a broader disciplinary conversation? How do visual conventions intersect with visual inventions? The remaining sections explore these questions in relation to other instances of anthropological diagramming.

### On Graphic Excess: Logical Relations and Unwanted Implications

Those who see value in diagrams have a paradoxical response to claims that diagrams are useless and add nothing to the text because they require textual explanation. The value of diagrams lies, proponents retort, not in saying *more* than the text but in saying *less*. From Peirce onward, as the editors remind us in their introduction, diagrams have been praised as “a skeleton-like sketch of its object ... constructed from rational relations” (Stjernfelt 2000: 363). In this view, what diagrams add inheres precisely in what they cut away: verbose description and its thick unintended implications and echoes. By leaving a mere skeleton, diagrams make conceptual relations, patterns, and structures visible.

In this respect, diagrams can be interestingly juxtaposed to another form of graphic convention that some anthropologists briefly experimented with in the mid-twentieth century, and which is definitely *not* making a comeback. This was the thought that one might profitably seek to express generalizations about social relations in terms of an algebraic language. In his book *The Theory of Social Structure*, Siegfried Nadel (1956), a key proponent of this idea, sought to devise and propound such a notational language, combining the conventions of mathematics and formal logic. To take only two early and very simple examples, the thought that a social role ( $p$ ) is made up of a series or sum ( $\Sigma$ ) of attributes might be noted as

$$p = \Sigma a, b, c \dots n$$

If one wishes to note that a role includes one pivotal attribute ( $p$ ) and that some of its attributes are optional, this could be written as

$$p = \Sigma p, a, b \dots l/m/n$$

The complexity of these formulae escalates throughout the book, such that the reader will later find the illuminating thought that

if  $E : A \ [ \geq (crb) ]$  is such that  
 $ErA \ E \ (ca) \ A$   
 $\therefore ErA \rightarrow A \ [ \geq (crb) ]$

In fairness, it must be said that Nadel was characteristically cautious about the power and limits of his proposed system of notation. Its aim was primarily “to help in demonstrating certain complicated situations more simply and accurately than can be done by verbose descriptions” (ibid.: 6). He did occasionally suggest that the notation might enable a kind of calculus, making visible some entailments that would not have been discovered if the situation had merely been stated in conventional language (ibid.: 56–57). Fundamentally, though, the aim of the formulae was to induce a certain kind of rigor to the discussion: “They certainly produce, in those who use them, a new attitude, a new way of looking at the material to be handled: which is probably the decisive step” (ibid.: 7).

Nadel’s notation, perhaps unsurprisingly, did not catch on. On the rare occasions when it is remembered, it is with more than a smattering of derision (e.g., Ingold 2008: 72–73). This was already a contemporary response. In a scathing review of the book, Edmund Leach (1976) described Nadel’s attempt to devise a logical notation as ‘disastrous’, adding that “none of these symbolic statements has any meaning until Nadel has himself explained them in his accompanying text and none of them leads to conclusions which are not much more readily propounded in simple English. The only positive effect of this excursion into ‘mathematics’ is to deter the reader from trying to understand the argument” (ibid.: 133).

And yet, somewhat paradoxically, in his Malinowski lecture given the following year, Leach himself would propound the virtues of algebraic notation in terms rather similar to those of Nadel. In a now famous critique of the structural-functionalist study of kinship, Leach (1966: 10) began by noting the way some standard anthropological kinship terminology betrays ethnographic realities: “If the Trobrianders say—as they do say both in word and deed—that the relation between a father and his son is much the same as the relation between male cross-cousins and as the relation between brothers-in-law, but absolutely different from the relation between a mother and her child, then we must accept the fact that this is so. And in that case we delude ourselves and everyone else if we call such a relationship *filiation*.” Leach then demonstrated, using a pair of diagrams to which I return below, that a much clearer sense of the ethnographic situation could be garnered by decomposing ‘filiation’ into two variables: filiation with the father (q) and filiation with the mother (p).

The various comparative questions relating to filiation (including the then current debates around patrilineal, matrilineal, and complementary descent systems) could then be stated in terms of various ratios  $Z$ , where  $Z = p/q$ .

Leach (1966: 17) anticipated critics making much the same observation that he himself had thrown at Nadel the previous year:

In a way this is all very elementary. Those of you who teach social anthropology may protest that, leaving out the algebra, this is the sort of thing we talk about to first year students in their first term. And I agree; but *because* you leave out the algebra, you have to talk about descent and filiation and extra-clan kinship and sociological paternity and so on and your pupils get more and more bewildered at every step. In contrast what I am saying is so easy that even professors ought to be able to understand! It is not algebra that is confusing but the lack of it. After all, you professionals have long been familiar with both the Trobriand and the Kachin ethnographic facts, but I suspect that you have *not* until this moment perceived that they represent two examples of the same pattern—you have been unable to perceive this because you were trapped by the conventional categories of structural classification. Now that I have pointed out the mathematical pattern the similarity is obvious ... But let me repeat. I am not telling you to become mathematicians. All I am asking is: don't start off your argument with a lot of value loaded concepts which prejudice the whole issue.

The merit of putting a statement into an algebraic form is that one letter of the alphabet is as good or as bad as any other. Put the same statement into concept language, with words like paternity and filiation stuck in the middle of it, and God help you!

In sum, Leach's defense of algebraic notation overlaps substantially with Nadel's.<sup>2</sup> Algebraic notation makes description simple and accurate by avoiding unintended verbal implications, and it induces a new way of seeing. And, again not unpredictably, what Leach himself described as a "pseudo-mathematics" (ibid.: 8) was greeted with the same skepticism with which he had greeted Nadel's. As Barnes (1962: 406) observed, "a characteristic of pseudo-mathematics is that each symbolic pseudo-statement has to be translated into words as we go along."



This brief excursion through the mostly forgotten episode of algebraic anthropology provides a comparative perspective on our discussion of diagrams. We find algebra and diagrams being criticized for the same reasons—that they merely repeat the textual content, and that they can lend an air of scientific rigor to observations that are themselves not necessarily rigorous. We find their proponents praising them precisely for the same reasons—that they produce a

skeletal representation which cuts away unintended or irrelevant verbal implications, and that they thus make visible logical relations in otherwise familiar material. Both diagrams and logical notation are a way of seeing otherwise.

The previous discussion suggests one important difference, however. Algebraic notation was praised for cleaning up unwanted implications, since one letter of the alphabet was as good as any other. In this particular respect, the mid-twentieth-century vision of algebra as a means of anthropological communication shares some of the long-standing rhetorical force of scientific appeals to quantification—namely, the thought that, as Leibniz put it, “most disputes arise from the lack of clarity in things, that is, from the failure to reduce them to numbers” (quoted in Daston 1995: 9). As historians of science have noted, this particular vision of quantification implied a moral economy of communicability and unification, one that was “sociable but intolerant of deviation” (ibid.; cf. Porter 1992). Nadel’s and Leach’s praise for algebra’s purported virtue of cutting away terminological imprecision evokes similar visions of disciplinary unification.

The same cannot automatically be assumed of diagrams. Certainly, diagrams do cut away some implications, but they also add others. Even the simplest visual forms are rich with conceptual implications, many of them entirely ancillary to the logical relations that the author initially wished to convey: circles imply closure and perfection; unbroken lines seem to suggest that objects have firm boundaries; arrows figure a kind of linear progression, although they might only be intended to suggest entailment, or the reverse; relative size can always seem to imply importance even if it was only meant to ensure readability.

The notion of a diagram that can stand on its own and be read without textual explanation—the sort of ideal implied by critics who complain that a diagram adds nothing if it has to be explained by the text—is thus fundamentally misguided. Diagrams are inherently polysemic. They fundamentally require exposition and ‘control’ by a textual explanation that pinpoints which features the reader ought to attend to, and which are incidental or even misleading. In this respect, diagrams are no different, of course, from the text itself. Just as ideas like ‘filiation’ or ‘paternity’ carry unwanted implications or obfuscatory possibilities, so do circles, arrows, and dotted lines. The same sort of work of definition and control has to go into the framing of both.

So what, then, is the added value of diagrams? It lies precisely in the fact that the entailments and implications—the conceptual ‘drift’ and ‘bleed’, one might say—of words and figures is not the same. Language lies with all the force of etymological echoes, tautology, poetic fudges, and non-linear expositions of various kinds that paper over incoherences and gaps in argument. Diagrams have a way to cut through all of these obfuscations, to keep the text honest. But images also lie, through a different kind of polysemy and through the constant ambiguity between what is being figured and what is merely a convenient way

to draw something. Is the distance between these two forms, their respective size, or the thickness of the line meant to be relevant, or is it merely the clearest way to arrange a picture on the page? The text that accompanies diagrams keeps them honest in turn by pointing to what matters and what does not.

Language lies and so do figures (cf. Partridge 2014)—but they lie at cross-purposes. As a result, they can productively act as a control for each other. The initial Peircean idea of diagrams as a skeletal assemblage of rational relations is only half of the picture. Yes, diagrams can do this productive work of cutting away the drift and bleed of language, but only if their own drift and bleed have first been cut away by some explanatory text. Diagrams are ‘clean’ because the accompanying words clean them. They are, to parody Bourdieu (1977: 72), “structured structures which are predisposed to function as structuring structures.” They are ‘predisposed’ because of the inherent tension between the way in which words and images leak meanings. Keeping a verbal channel and a visual channel open alongside each other acts as a form of two-way control.

However, this talk of rigor and control is all very stern. There is a more positive point to be made, for as we saw in my initial example, it is also in the ways that text and images exceed each other, escape each other’s control, that they can act together as a productive engine for driving an argument forward. As we saw in the previous section, new ideas can stem precisely from the ways in which a figure cannot adequately render a conceptual point—or, conversely, from the ways in which drawing something out suggests unintended entailments that exceed the arguments previously spelled out in words. Perhaps Nadel’s thought that notation might lead to calculus was not entirely misplaced. At the very least, rendering a verbal argument into images will often suggest hypothetical further entailments, which would then need to be worked out. The ongoing struggle of fitting and refitting images and words to each other is a path to both control and creativity.

## **On Graphic Coherence: Between Convention and Invention**

While in the previous section we have been mainly dealing with the question of excess (what does a diagram add to the text?), this discussion has taken us into a consideration of coherence. We ended up, in effect, with the observation that the constant—and often difficult—striving for coherence between texts and diagrams can confer a certain kind of rigor to arguments that combine them. The fact that such coherence is never perfect lends a certain spark to the process and opens up new possibilities.

But the brief excursus through algebraic anthropology suggests another, complementary set of observations. For what distinguishes algebraic notation from the dominant way in which diagrams are used by anthropologists today is

its conventional nature. Algebraic notation is a code—its terms are defined once and for all, and they are kept stable through multiple permutations and iterations in the same text or, ideally (if the notation catches on) in multiple texts.

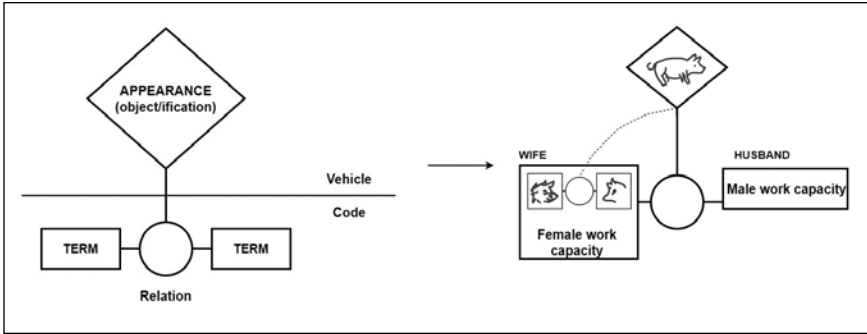
By contrast, anthropological diagrams, as they are being used today, are mainly what one might call ‘single-use’ diagrams: each is a specific, stand-alone visual device for representing a particular conceptual point, relationship, or argument. There is no assumption that the elements of any given diagram will be carried forward to any other diagram in the same text. Each diagram is a monad, a contingent, single-purpose figuration. Any visual coherence is entirely a local matter of the relationship between this particular image and the immediately adjacent text, raising the sorts of questions we have explored above.

Between the extremes of logical notation and single-use diagrams, however, lies the use of diagrams as described in the first section of this article. Here the text is accompanied by a series of diagrams that share a set of visual elements. Once a symbol has been established, it remains stable in subsequent diagrams: the diagrams share a visual convention. It thus becomes possible to ask, not only whether diagrams are coherent with the text that is immediately adjacent, but also whether they are coherent with the other diagrams in the series. Another classic instance of this is Gell’s (1999: 29–75) essay “Strathernograms,” with which I began this article, which sets out to give a diagrammatic representation of Gell’s reading of Marilyn Strathern’s (1988) arguments in *The Gender of the Gift*.

While Gell himself does not state this, I suspect that in introducing the notion of graphic coherence, what he is primarily evoking is precisely this effect of seriality. What “Strathernograms” turns on is not merely coherence between the text and the ‘graphic channel’, but also coherence within the graphic channel itself, ensured by the use of a consistent graphic convention. Gell (1999: 36–37) defines his own convention explicitly: ‘terms’ are figured by boxes, ‘relations’ by circles or ovals, and ‘appearances’ by lozenges (see fig. 6). While Gell does not tell us this, he is in fact drawing on an existing diagrammatic convention—the ‘entity-relationship’ model developed by computer scientist Peter Chen (1989). In order to illustrate Strathern’s argument, Gell uses the entity-relationship convention in 19 diagrams of increasing complexity (some of them matching that of Nadel’s formulae), interspersed with other diagrams and line drawings.

Once again, I am interested in the form rather than the substance of the argument here. The distinction between single-use diagrams and serial diagrams is worth attending to, for it raises the broader question of the ‘conventional’ in anthropological uses of diagrams. Unlike single-use diagrams, serial diagrams that deploy a shared visual convention, as in Gell’s case, introduce a different, additional requirement of coherence. Such diagrams need to be coherent with the text they accompany, of course, but they also need to be coherent among





**FIGURE 6:** Gell's convention. Drawn after the original in Gell (1999). Originally published by Cambridge University Press.

themselves. This second requirement makes it harder to cheat, to give a mere 'air of logic'. It ties graphic coherence to a broader standard.

This is even clearer in cases where graphic conventions are shared, not simply within one text, but within a broader conversation. The classic graphic convention in anthropology was of course that of kinship diagrams, which involved three kinds of formal relationships—alliance (=), filiation (|), sibling-ship (—)—between two distinct and mutually exclusive genders (circles and triangles). Each of these relations and entities was taken to form a complete set. We are in fact only one step short of a logical notation. Graphic coherence here is scaffolded by a stock set of visual terms. Through this convention, kinship diagrams spoke to each other, not only within a single text, as in Gell's case, but across different texts. It would be very easy to point out, within this convention, what it might mean for a kinship diagram to be 'incoherent', although we shall see in a moment that incoherence in the sense of a bending of convention need not be a bad thing. Conversely, it would be rather difficult to mask textual incoherence through such conventional, formalized visual representation—one would more likely make such incoherence evident.

Unpacking the notion of graphic coherence has thus led us to a contrast between what one might think of as convention and invention in anthropological uses of diagrams (cf. Wagner 1981, another great diagrammatist). Single-use diagrams are self-conscious inventions: each proposes a new, bespoke visual form to map, express, or indeed constitute a particular conceptual configuration. At the opposite end of the scale, just short of the move out of diagrams and into logical notation, classic kinship diagrams are thoroughly conventional, providing a stock visual vocabulary that frames new permutations.

Stated like this, however, the difference is unhelpfully stark. On the one hand, even single-use diagrams tend to draw on a set of conventional geometrical figures (lines, circles, etc.), and we saw in the previous sections how these

simple geometrical forms carry much conventional baggage. Conversely, the power of ‘conventional’ visual languages often lies precisely in the novel inventions they enable. Minimally, every new kinship diagram, insofar as it is not a direct reproduction of a previous one, is an inventive reconfiguration of conventional elements—meaning, in this sense, that is always premised on invention (Holbraad and Pedersen 2017; Wagner 1981). Less trivially, some of the best diagrams in the history of anthropology have relied on a self-conscious play with conventional visual languages. In sum, the contrast between diagrammatic invention and convention speaks to the way—picked up by other contributors to this special issue—in which description and prescription are interwoven in diagrams. Formal, conventional, diagrammatic languages are prescriptive. Working with and against the grain of such prescriptions can be an intensely inventive act.

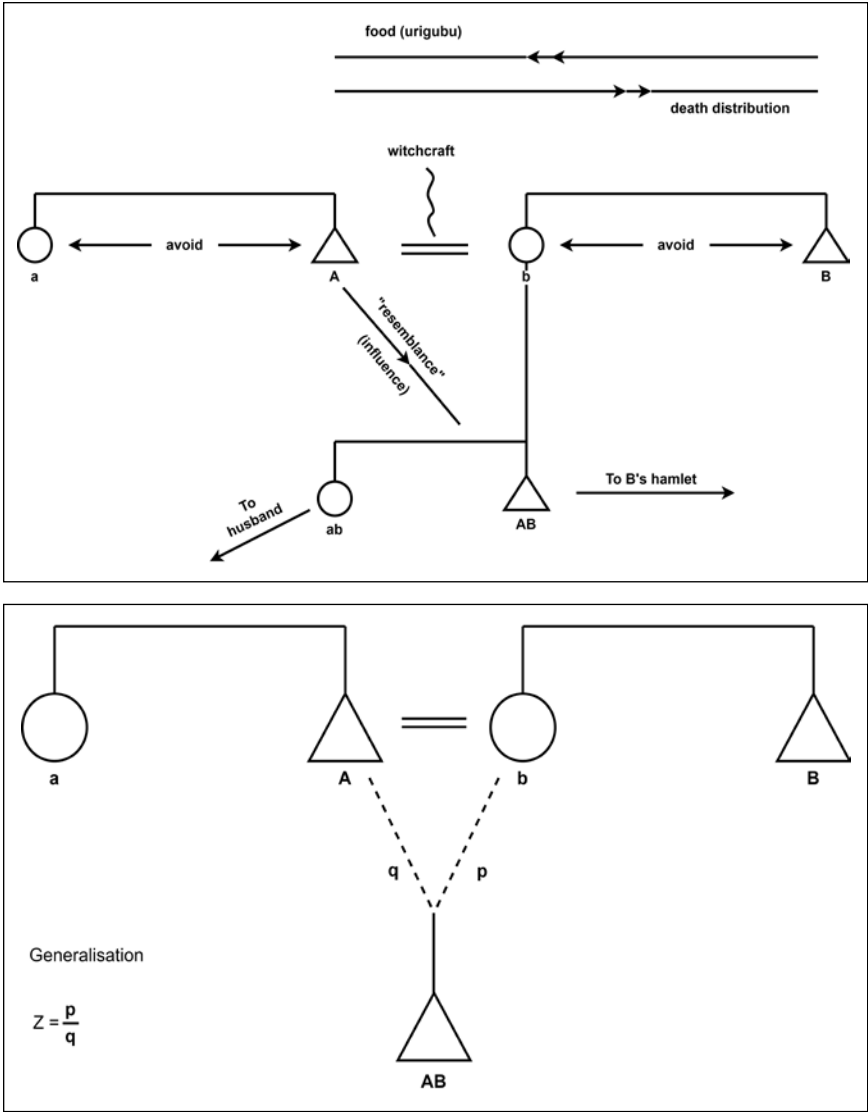
As to the former point (convention as prescription), kinship diagrams are a perfect and classic example. The kinship diagram convention derives its power and durability in part from its ability to remain coherent across texts hailing from radically different conceptual perspectives. The classic debates over the ‘real’ or merely ‘conceptual’ existence of social structure (Dumont [1971] 2006; Evans-Pritchard 1950; Leach 1966; Lévi-Strauss 1958; Nadel 1957; Radcliffe-Brown 1940) nicely pinpoint this issue. While structuralists and functionalists differed profoundly as to their ontological commitments concerning the nature of the social, and more specifically of kinship relations, they could unproblematically share their kinship diagrams. Everyone shared in essence the thought that one might visually represent men and women, alliance, filiation, and siblingship, even though what each of these figures indexed in ontological terms (statistical patterns, formal rules, roles, individuals, etc.) was thoroughly up for grabs. The graphic coherence of a conventional diagrammatic language stemmed from and underpinned a conceptual coherence—the outline of a shared disciplinary conversation, however contentious.

And yet, while the convention of kinship diagrams was broad enough to accommodate radical differences of opinion, it nevertheless required some questions to remain unasked. As Bouquet (1996: 44) notes, quoting Jameson via Clifford, “visualizing kinship in the genealogical diagram reflects ‘the limits of a specific ideological consciousness, [marking] the conceptual points beyond which that consciousness cannot go, and between which it is condemned to oscillate.’” As soon as ‘kinship’ itself came to be seen as a specifically Euro-American cultural figuration (Carsten 2000; Schneider 1984), the vision of two mutually exclusive and jointly exhaustive genders and of three fundamental relationships lost some of its shine. The very idea of cross-culturally stable forms of personhood and relation has fallen away, and with it the meaningfulness of *any* standard visual language in which to represent such things. The conceptual features of a given ‘culture of relatedness’ (Carsten 2000) might be

the object of a particular diagrammatic representation, but the idea of drawing all of these different diagrams from the same stock visual terminology seems to serve no purpose. For what, after all, would such stock visual terminology itself index? It is a truism to say that anthropologists today would find it hard to agree on any given list of fundamental relationships. Kinship diagrams persist, of course, but they have been robbed of their fundamental theoretical ‘footing’. The forms they pick out as their building blocks now seem arbitrary and problematically—rather than productively—partial. Their graphic coherence is the ghost of a conventional vision of social life that anthropologists no longer share.

Any visual convention, in other words, is restrictive and comes with blind spots. Even single-use diagrams suffer from this limitation, since, as we noted above, they draw on a stock of geometrical figures (circles, lines, arrows, squares, and the like), each of which carries its own unintended conceptual echoes, however slight. No diagram is a complete invention.

Conversely however, it is often precisely this conventional undertow that enables invention. Consider, for example, Leach’s (1966: 11–12) use of diagrams in *Rethinking Anthropology*. In order to illustrate his iconoclastic critique of functionalist kinship theory, and specifically of the concept of ‘filiation’, Leach amends standard kinship diagrams in various ways. First, he grafts a whole range of extraneous relations and factors onto a standard kinship diagram. The point is explicitly to provide a visual summary of Malinowski’s arguments about Trobriand kinship, witchcraft, and exchange, showing the complex interrelation of different elements of cultural behavior. Crucially, however, this is not merely an addition. Rather, what is normally a single vertical line denoting filiation, stemming from the = denoting marriage (fig. 7a), is here decomposed into two lines: a descent line stemming directly from the mother to the son, and a diagonal line marked “‘resemblance’ (influence),” which does not quite join the father and the son (fig. 7a). In sum, this diagram breaks the convention of kinship notations by multiplying filiation and setting it out—visually—as simply one among a multiplicity of relationships of various kinds. From a strictly canonical perspective, as a kinship diagram, it might be seen as tending toward incoherence, yet it is perfectly coherent in relation to the text it accompanies. The diagram visualizes a complex theoretical point, namely, that descent as commonly figured by anthropologists is only one among many forms of relationship, and a decomposable form at that. The diagram that follows (fig. 7b) recomposes this multiplicity of relations into a focused illustration of Leach’s alternative, ‘algebraic’ mode of generalization. Once we have decomposed descent, it is possible to imagine formalizing two components—one coming from the mother and another from the father. This provides a stepping-stone to Leach’s algebraic generalizations. Leach’s inventive reconfiguration of generalizations about descent relies on a direct and knowing play with an existing visual convention.<sup>3</sup>



**FIGURES 7a and 7b:** Leach's inventions. Drawn after the originals in Leach (1966). Originally published by Cambridge University Press.

Any diagrammatic convention can become a device for invention. To return to an example mentioned above, Gell 'invents' with Chen's entity-relationship model in a number of ways. For instance, by placing rectangles or lozenges inside other rectangles or lozenges—a possibility that makes little sense in the terms in which this visual convention was first outlined—Gell illustrates the

fractal character of Strathern's Melanesian aesthetic. Conversely, any diagrammatic convention also constrains. Thus, by comparison with kinship diagrammatic conventions, Gell's entity-relationship model might seem to be almost infinitely capacious, since it merely indexes 'relationships' and 'terms'. Could one imagine a less constraining figuration? And yet, even here, the limits of convention bite back. Thus, recognizing the conventional aspect of Gell's diagrams casts interesting light on a fundamental point of contention surrounding his representation of Strathern's argument about relations. As Gell (1999: 35) puts it:

What is a 'relation'? Strathern does not tell us this, but, on her behalf, I assert that a relation is a connection between two terms ... I think that one can justifiably criticize Strathern for not doing enough to elucidate the concept of relationship, as I have just done, and in particular for saying so much about relationships without introducing the logically essential concept of terms, i.e., what relationships relate. She took all this for granted. In what follows, relationships are necessarily between terms, and terms are treated as constituted out of the relationships in which they participate.

Gell's rendering of Strathern's arguments is thus structured by the reintroduction of a binary contrast between terms and relations. And yet, Strathern (2014) herself has argued that one key affordance of the notion of 'relation' is precisely the ability to invoke relations without specifying their terms. My aim is not to enter into that dispute, but simply to note that the relations/terms binary speaks directly to the visual possibilities and restrictions of an entity-relationship model (as the name of that model suggests). It would be fascinating to know which came first as Gell was writing that piece—his choice of the entity-relationship visual model, or his recognition of an absence of 'terms' in Strathern. Without such insight into Gell's process, one can only say that the diagrammatic conventions and the theoretical possibilities and limitations of his argument (about Strathern's argument) are in some general sense mutually constitutive. Thus, even this seemingly infinitely capacious visual convention is restrictive and comes with blind spots.

In sum, the point of this section is that the existence of a conventional visual language gives visual invention something productive to strain against. The dynamic is similar to the broader one described in earlier sections, whereby diagrams both complement and strain against the text they accompany.

## Conclusion

Despite signs of a renaissance in diagramming after the literary turn, many anthropologists remain skeptical of diagrams, while those who use them have rarely sought to mount a defense of the practice in principle. In the absence of

such a defense, it is easy to accuse diagram-wielding anthropologists of obfuscation or scientific posturing—and of course the charge may in some cases fit. But there is more to diagrams than bluster, rhetoric, and style. I have sought in this article to lay out some of the positive arguments for working with diagrams in anthropology.

Thinking about diagrams from the ‘inside’, as it were, provides a new perspective on the two critiques we started from—the critique that diagrams are reductive, and the critique that they lend a spurious consistency and authority. Like all of such critiques, these need to be substantiated in particular cases. Critiques that identify particular omissions are valuable, but they are hardly a reason to abandon diagramming altogether. While they are admittedly flawed tools, diagrams do have value—in some ways, their value lies precisely in their limitations.

This value, I have argued, lies not primarily in diagrams’ inherently logical nature, or in a propensity to always clarify words. Diagrams can also be tricky, polysemic, and confusing—they can have a spurious coherence. But then, words are tricky too. The value of adding what Gell terms a ‘visual channel’ to anthropological texts stems, I would argue, from the different ways in which the trickiness of words and of graphics is configured at the intersection of conventions and inventions. The strain of seeking to maintain coherence both within and between these two channels simultaneously helps to make arguments more robust. The creative flashes produced when this coherence is disturbed provide an unparalleled engine of conceptual invention.

This defense is very much in the same spirit as Rumsey’s (2004) defense of tropes in anthropological writing. It has become commonplace to undercut the authority of anthropological texts by pointing at the way in which they deploy literary tropes and devices (Clifford and Marcus 1986). Yet this critique seems to imply a crypto-positivism of its own, as if tropes stood in the way of representational truth or accuracy. As Rumsey notes, the formal devices deployed to macro-structure ethnographic monographs—whether this be on the classic holistic part-whole model (Thornton 1988), or in the genre of intentionally fragmentary collections held together by a thematic trope, as Rumsey notes of Anna Tsing’s (1993) *In The Realm of the Diamond Queen*—are not only inescapable, but can be extremely productive. The use of such macro-tropes and structural devices, Rumsey (2004: 288) concludes, “has contributed in an essential way to anthropological understanding, in at least some cases running ahead of related developments in theory rather than merely changing in response to them.” To be aware of such tropes and structural devices is to be in a position to use them in novel ways and devise new ones to suit new purposes.

Rumsey’s discussion reminds us that ethnographic texts themselves already work in some diagrammatic-like ways (Rupert Stasch, pers. comm.). They deploy form and structural devices in order to scale down and provide

'sketches' of an object elsewhere. This is the converse of saying, as I have at various points, that diagrams perform in some ways rather like a language (e.g., that they 'lie'). And yet recognizing these echoes between how texts work and how diagrams work does not reduce the core point I am making here, which is that texts and diagrams operate on fundamentally different principles, and the tensions introduced by trying to assemble them as two simultaneous channels in the same argument can have distinctive effects. The effect is similar to that which would be achieved, for instance, if one were trying to simultaneously run an argument in two languages—as indeed many ethnographies in effect do, moving back and forth between indigenous terms and necessarily imperfect translations or equivocations (cf. Viveiros de Castro 2004).

In other words, I am pointing to a broader formal device—that of fostering internal multiplicity. As I said at the outset, this argument about diagrams is not unrelated to my argument about anthropological comparison. The relationship is analogical. The particular formal device I have described here within one text—the way in which a visual channel and a textual channel can work to both curtail and extend each other—is a scaled-down version of a broader dynamic in the discipline of anthropology. As Andrew Abbott (2001) has suggested of academic disciplines more broadly, anthropology as a practice, as a discipline, exists in the tension of its internal differences. Anthropology is subdivided into groups pursuing incommensurable ends and visions, as I have suggested above in relation to comparison. Some of us use comparison to generalize, others seek to highlight difference, some see the self-critique of Western concepts as their main goal, while others envisage anthropology as a device for the pursuit of social justice. We are also subdivided into groups constituted around the knowledge of and passionate engagement with particular areas and themes, different theoretical schools, national traditions, and political imaginaries. These differences are not stable or essential; they shift and churn in relation to one another. Yet this does not mean anthropology is just an empty signifier. Rather, the discipline lives through the actual institutional spaces in which these differences are forged, sustained, and exhibited—in seminars, in departments, in conferences, in peer-reviewed journals, in book reviews, in edited volumes, and the like. In such settings, these myriad projects, purposes, and expert visions rub up against each other, simultaneously curtailing each other's flights of fancy and extending them (Candea 2018).

Nor do anthropologists speak just to one another. Our arguments are buffeted not only by the requirements and challenges of differently situated anthropologists, but also by academics from other disciplines, and beyond that by different people, including those with whom anthropologists work, and beyond that still by a world of non-human entities of various kinds that may also raise objections to our accounts. Like the internal resistances of anthropology, these external resistances put our accounts to the test, and in the process strengthen

them. We find here, writ large, the same dynamic I have tried to elucidate at the intersection of visual and verbal channels inside an anthropological text—that particular model of rigor and invention points to a broader epistemic form in anthropology writ large.

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## Notes

1. Although that possibility is explored by the introduction of intensity, as discussed below.
2. This overlap exists even though Leach (1966: 8) attempted—less than conclusively—to distinguish himself by suggesting that Nadel sought to apply a mathematical procedure to his arguments, whereas one ought to use only a mathematical notation.
3. More recently, Knut Rio (2005, 2007) has operated similarly intriguing distortions of the kinship diagram convention.

## References

- Abbott, Andrew. 2001. *Chaos of Disciplines*. Chicago: University of Chicago Press.
- Barnes, J. A. 1962. "Rethinking and Rejoining: Leach, Fortes and Filiation." *Journal of the Polynesian Society* 71 (4): 403–410.
- Bouquet, Mary. 1996. "Family Trees and Their Affinities: The Visual Imperative of the Genealogical Diagram." *Journal of the Royal Anthropological Institute* 2 (1): 43–66.



- Bourdieu, Pierre. 1977. *Outline of a Theory of Practice*. Trans. Richard Nice. Cambridge: Cambridge University Press.
- Candea, Matei. 2016. "De deux modalités de la comparaison en anthropologie sociale" [On two modalities of comparison in social anthropology]. *L'Homme* 218: 183–218.
- Candea, Matei. 2018. *Comparison in Anthropology: The Impossible Method*. Cambridge: Cambridge University Press.
- Carsten, Janet. 2000. "Introduction: Cultures of Relatedness." In *Cultures of Relatedness: New Approaches to the Study of Kinship*, ed. Janet Carsten, 1–36. Cambridge: Cambridge University Press.
- Chen, Peter Pin-Shan. 1989. "The Entity-Relationship Model: Towards a Unified View of Data." In *Readings in Artificial Intelligence and Databases*, ed. John Mylopoulos and Michael L. Brodie, 98–111. San Francisco: Morgan Kaufmann.
- Clifford, James, and George Marcus, eds. 1986. *Writing Culture: The Poetics and Politics of Ethnography*. Berkeley: University of California Press.
- Corsín Jiménez, Alberto. 2011. "Daribi Kinship at Perpendicular Angles: A Trompe l'Oeil Anthropology." *HAU: Journal of Ethnographic Theory* 1 (1): 141–157.
- Daston, Lorraine. 1995. "The Moral Economy of Science." *Osiris* 10: 2–24.
- Dumont, Louis. (1971) 2006. *An Introduction to Two Theories of Social Anthropology: Descent Groups and Marriage Alliance*. Ed. and trans. Robert Parkin. New York: Berghahn Books.
- Evans-Pritchard, E. E. 1950. "Social Anthropology: Past and Present: The Marett Lecture, 1950." *Man* 50: 118–124.
- Foks, Freddy. 2019. "Constructing the Field in Colonial Africa: Power, Persona and Paper Tools." Paper presented at the Senior Seminar, 25 January, Department of Social Anthropology, University of Cambridge.
- Gell, Alfred. 1999. *The Art of Anthropology: Essays and Diagrams*. Ed. Eric Hirsch. Oxford: Berg.
- Goyet, Francis. 2014. "Comparison." In *Dictionary of Untranslatables: A Philosophical Lexicon*, ed. Barbara Cassin, Emily Apter, Jacques Lezra, and Michael Wood; trans. Steven Rendall, Christian Hubert, Jeffrey Mehlman, Nathanael Stein, and Michael Syrotinski, 159–164. Princeton, NJ: Princeton University Press.
- Holbraad, Martin. 2012. *Truth in Motion: The Recursive Anthropology of Cuban Divination*. Chicago: University of Chicago Press.
- Holbraad, Martin, and Morten Axel Pedersen. 2009. "Planet M: The Intense Abstraction of Marilyn Strathern." *Anthropological Theory* 9 (4): 371–394.
- Holbraad, Martin, and Morten Axel Pedersen. 2017. *The Ontological Turn: An Anthropological Exposition*. Cambridge: Cambridge University Press.
- Ingold, Tim. 2008. "Anthropology Is Not Ethnography." *Proceedings of the British Academy* 154: 69–92.
- Ingold, Tim. 2000. *The Perception of the Environment: Essays on Livelihood, Dwelling and Skill*. London ; New York: Routledge.
- Latour, Bruno. 1993. *We Have Never Been Modern*. Trans. Catherine Porter. London: Harvester Wheatsheaf.

- Latour, Bruno. 2004. "Why Has Critique Run Out of Steam? From Matters of Fact to Matters of Concern." *Critical Inquiry* 30: 225–248.
- Leach, Edmund. 1966. *Rethinking Anthropology*. London: Athlone Press.
- Leach, Edmund. 1976. "Social Anthropology: A Natural Science of Society?" *Proceedings of the British Academy* 62: 157–180.
- Lévi-Strauss, Claude. 1958. *Anthropologie Structurale* [Structural anthropology]. Paris: Plon.
- Mill, John Stuart. 1856. *A System of Logic, Ratiocinative and Inductive, Being a Connected View of the Principles of Evidence, and the Methods of Scientific Investigation*. Vol. 2. London: John W. Parker and Son.
- Nadel, Siegfried F. 1957. *The Theory of Social Structure*. London: Cohen & West.
- Partridge, Tristan. 2014. "Diagrams in Anthropology: Lines and Interactions." *Life Off the Grid*. <https://anthropologyoffthegrid.wordpress.com/ethnograms/diagrams-in-anthropology/>.
- Porter, Theodore M. 1992. "Quantification and the Accounting Ideal in Science." *Social Studies of Science* 22 (4): 633–651.
- Radcliffe-Brown, A. R. 1940. "On Social Structure." *Journal of the Royal Anthropological Institute of Great Britain and Ireland* 70 (1): 1–12.
- Rio, Knut M. 2005. "Discussions around a Sand-Drawing: Creations of Agency and Society in Melanesia." *Journal of the Royal Anthropological Institute* 11 (3): 401–423.
- Rio, Knut M. 2007. *The Power of Perspective: Social Ontology and Agency on Ambrym Island, Vanuatu*. New York: Berghahn Books.
- Rumsey, Alan. 2004. "Ethnographic Macro-Tropes and Anthropological Theory." *Anthropological Theory* 4 (3): 267–298.
- Schneider, David M. 1984. *A Critique of the Study of Kinship*. Ann Arbor: University of Michigan Press.
- Stjernfelt, Frederik. 2000. "Diagrams as Centerpiece of a Peircean Epistemology." *Transactions of the Charles S. Peirce Society* 36 (3): 357–384.
- Strathern, Marilyn. 1988. *The Gender of the Gift: Problems with Women and Problems with Society in Melanesia*. Berkeley: University of California Press.
- Strathern, Marilyn. 2014. "Reading Relations Backwards." *Journal of the Royal Anthropological Institute* 20 (1): 3–19.
- Thornton, R. J. 1988. "The Rhetoric of Ethnographic Holism." *Cultural Anthropology* 3 (3): 285–303.
- Tsing, Anna Lowenhaupt. 1993. *In the Realm of the Diamond Queen: Marginality in an Out-of-the-Way Place*. Princeton, NJ: Princeton University Press.
- Viveiros de Castro, Eduardo. 2001. "GUT Feelings about Amazonia: Potential Affinity and the Construction of Sociality." In *Beyond the Visible and the Material: The Amerindianization of Society in the Work of Peter Rivière*, ed. Laura M. Rival and Neil Whitehead, 19–43. New York: Oxford University Press.
- Viveiros de Castro, Eduardo. 2004. "Perspectival Anthropology and the Method of Controlled Equivocation." *Tipiti* 2 (1): 3–22.
- Wagner, Roy. 1981. *The Invention of Culture*. Rev. ed. Chicago: University of Chicago Press.