



# A Particularist Approach to Arguments by Analogy

José Alhambra<sup>1</sup>

Accepted: 13 April 2023 / Published online: 16 May 2023  
© The Author(s) 2023

## Abstract

In this article I defend what I call a ‘particularist approach to arguments by analogy.’ Particularism is opposed to generalism, which is the thesis that arguments by analogy require a universal principle that covers cases compared and guarantees the conclusion. Particularism rejects this claim and holds that arguments by analogy operate on particular cases. I elaborate on two ideas that support this position. On the one hand, I contend that an analogy can be seen as a parallelism of argumentative relationships, drawing on the distinction between similarity and analogy (Gentner 1983) and on the meta-argumentative account of arguments by analogy (Woods and Hudak 1989). On the other hand, I argue that universal principles are not necessary neither for the analysis nor the evaluation of arguments by analogy (Govier 1989) and that, rather than being a requirement, they can be seen as by-products of good analogies.

**Keywords** Arguments by analogy · Particularism and generalism · Meta-arguments · Weighing of reasons

## 1 Introduction

In what follows I will defend what I call a ‘particularist approach to arguments by analogy.’ So, this paper deals with arguments in which an analogy plays a non-trivial role in giving support to a claim. This excludes both non-argumentative uses of analogy, as in mere illustrations, and cases where the analogy is not part of the reason put forward, as in arguments *for* an analogy. Nor will it deal with reasoning by analogy, understood as the psychological process attributed to an agent making analogies. These topics are important for a general theory of analogy but can be left aside here.

---

✉ José Alhambra  
jose.alhambra@uam.es

<sup>1</sup> Department of General Linguistics, Logic and Philosophy of Science, Modern Languages, Theory of Literature and Comparative Literature, East Asian Studies, Autonomous University of Madrid, Madrid, Spain

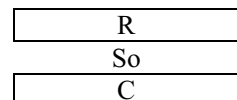
By analogy I will understand “a comparison between two objects, or systems of objects, that highlights respects in which they are thought to be similar” (Bartha 2010, p. 1). I will call these objects or systems of objects ‘source’ and ‘target’ cases. As we shall see, my understanding of analogy puts special emphasis on systematicity—broadly understood. In particular, it rests on the notion of ‘parallelism of argumentative relationships,’ not only because I am concerned with the argumentative use of analogies, but because, as we shall see, I argue that the source and the target cases in the sort of analogies I am interested in are themselves arguments. It is therefore essential to outline here the theory of argumentation that I am going to work with, namely the so-called ‘argument dialectics’ (Leal and Marraud 2022).

According to this theory, “arguing is presenting to someone something as a reason for something else” (Marraud 2020b, p. 2). This act of putting forward a consideration as favouring something else is essentially a linguistic act and, as such, it is marked by conventionalised linguistic indicators, such as the order of utterances, punctuation marks, intonation patterns or argumentative connectors. The practice of arguing can be approached from different perspectives. It is common to take the classical trichotomy as a reference and distinguish between rhetoric, dialectics, and logic (Wenzel 2006 [1999]). The first conceives argumentative exchanges as communicative processes centred on the purpose of the arguer; the second studies argumentation as a procedure subject to a set of conventional rules aimed at achieving the goals shared by the arguers, and the third studies the products of argumentation, that is, the arguments and their relations. Here I will adopt a fundamentally logical approach.

Since arguments are products of argumentation—as distinct from processes of persuasion and procedures of discussion—, and to argue is to exchange reasons with others, we can characterize them as compounds of two elements: the consideration presented as a reason and that for which that consideration is a reason (i.e., the claim). Incidentally, I conceive of arguments as ‘snapshots,’ so to say, of practices of exchanging reasons, and not as instances of abstract objects, whether purely formal or quasi-formal. Thus, if we want to find standards or criteria of evaluation, we must look for them in those practices and not in the abstract features of arguments themselves. I will refer to the statements that together comprise a single reason as ‘premises’ and to the statements that comprise the claim as ‘conclusion.’ To depict an argument, I will use the system of diagrams used in (Leal and Marraud 2022). A single argument (i.e., one that puts forward a single reason) is depicted by two rectangles joined by the connector ‘so’ (Fig. 1).

When we argue, then, we give others reasons to consider in order to defend a particular claim. But in doing so we also make commitments. Whoever presents an argument “ $R$  so  $C$ ” agrees that it is the case that  $R$  and that, given  $R$ , there is a reason for  $C$ . The second commitment can be expressed by resorting to the conditional ‘if

Fig. 1 Single argument



$R$ , then  $C$ .<sup>1</sup> During a discussion, our interlocutor may ask us to justify them, and this could give rise to a ‘chaining’ and a ‘warrant.’ A chaining arises when we give a reason to justify an assertion that is part of a reason previously presented, and a warrant is a general rule that justifies or explains the conditional associated with an argument, i.e., it tells us that cases like  $R$  generally function as reasons for cases like  $C$ . If someone argues, for example,

[1] You said that you’d come to my talk, so you ought to do it,

they may be asked to present evidence that this was said or to justify the conditional ‘if you said that you’d come to my talk, then you ought to do it’, for example by calling on a principle such as “promises must be kept” (or, as we shall see, by arguing by analogy). A warrant may in turn be justified, which gives rise to a chaining-like structure called ‘backing.’ Chainings, warrants, and backings are not part of arguments in the same sense as reasons and claims are—as we can argue without them, but not without a reason or a claim—, but they play an important role in the logical evaluation of arguments.<sup>2</sup>

A good argument from a logical point of view is one that puts forward a good reason, and a good reason is one that stands up to criticism. According to argument dialectics, logical criticisms are raised through counterarguments—this is what explains the term ‘dialectics’ in the label (see Leal and Marraud 2022, p. 283–284). A counterargument to an argument  $A$  is an argument whose conclusion is incompatible with some element or commitment associated with  $A$ . If someone presents [1], we can imagine at least three replies: (a) “that’s not true, in this recording it can be seen that I didn’t say something like that”; (b) “I said what I said only because you threatened me,” or (c) “it’s true, I made that promise, but a friend of mine has just had a car accident and I have to go to the hospital.” In (a) we give a reason to defend that a premise in [1] is not true; in (b) we appeal to a condition that has not been fulfilled for what has been said to constitute a reason for that claim, and in (c) we put forward a stronger reason to do something incompatible with the action mentioned in the claim. They are an ‘objection,’ a ‘rebuttal’ and a ‘refutation,’ respectively (see *Ibidem*, pp. 305–322). If an argument that poses a *prima facie* reason withstands objections and rebuttals, we say that it is ‘correct,’ and that it puts forward a *pro tanto* reason. If it also resists refutations, we say that it is not only correct, but also ‘conclusive,’ and that it puts forward a relatively strong (or *all-thing-considered*) reason. Conversely, if an argument does not resist objections or rebuttals, we say

<sup>1</sup> These conditionals express the relation between the premises and the conclusion of a particular argument, but they do not add anything to that argument. That is, they are neither a premise nor a warrant in the sense I am about to say, but rather an expression of what the arguer does in presenting something as a reason for something else.

<sup>2</sup> The issue whether or not warrants are part of the argument is controversial. My take on this is that warrants may be relevant for the logical evaluation of arguments, but they are not necessary. As will be seen in Sect. 4, I conceive of them as general, hypothetical statements with substantive content. If warrant thus understood were intrinsic to the notion of argument, then argumentation by analogy would be no more than a way of eliciting the warrant that the source and the target cases share, which is precisely the generalist position that I am contesting here.

that it is “incorrect,” and if it does not resist refutations, we say that, although it is correct, it is not conclusive (i.e., it puts forward a worthwhile reason, but a relatively weak one). In this picture, chainings, warrants and backings can be seen as responses to (possible or actual) criticism towards an argument.

Now we can tentatively characterize an argument by analogy as one in which a comparison between two objects or systems of objects (i.e., an analogy) is presented as a reason for assigning to one of them (the target) a property that the other (the source)—it is claimed—has. There are two possible readings of the relation between the comparison and the property to be transferred: (1) depending on the elements compared, the property to be transferred will vary; or (2) depending on the property to be transferred, the comparison will highlight different aspects of the elements compared. The first emphasises what has been called the ‘horizontal relation,’ i.e., the match between the source and the target cases, and the second emphasises the so-called ‘vertical relation,’ i.e., the relevance of the similarities between the source and the target cases to the property to be transferred.<sup>3</sup> Although I consider that (1) and (2) are complementary approaches, I will stress the latter: in arguing by analogy, we hold that a claim is supported by reasons because the case parallels another case in which it is assumed that a claim is supported by other reasons. So, what we are interested in are comparisons between relationships of a certain kind and not comparisons between properties of objects. My proposal is that this idea may help us design a particularist account of arguments by analogy. But before going into details, let us look at the debate between what I am calling particularist and generalist theories of analogy.

## 2 Generalism Versus Particularism

‘Generalism’ and ‘particularism’ come from the theory of normative reasons. They are opposite answers to the question of what role principles play in moral reasoning. Generalism is the thesis that “the very possibility of moral thought and judgement depends on the provision of a suitable supply of moral principles” (Dancy 2004, p. 7). To say that it is wrong for me to tell you that I will go to your talk and then not show up, I would need some general principle such as “promises must be kept,” “commitments create duties” or whatnot. Although these principles may be understood in different ways, and that gives rise to different varieties of generalism (*see* Mckeever and Ridge 2006), the underlying idea is that they are necessary for moral reasoning and judgement. Particularism rejects this claim and argues that, although principles may sometimes play a significant role in moral reasoning, they are not necessary.<sup>4</sup>

<sup>3</sup> This terminology comes from (Hesse 1966); see also (Bartha 2010). Juthe (2005) calls them ‘one-to-one relation’ and ‘relation of determination,’ respectively.

<sup>4</sup> A similar distinction has already been proposed in argumentation theory by Hubert Marraud (2020a, 2022). Generalism here is the thesis that “the very possibility of arguing depends on a suitable supply of general rules that specify what kinds of conclusions can be drawn from what kinds of data, while particularism denies this” (Marraud 2022, p. 1). For the generalist, to argue is always to apply general rules to particular cases, while the particularist contends that there are practices in which it is required to have and apply such rules, but others in which it is not. I will elaborate further on this idea in Sect. 4.1 below.

Here I will apply these terms to the study of arguments by analogy. When I speak of generalism and particularism, I will understand them as opposite answers to the question of whether arguments by analogy need principles to support their claim. In this context, it is generally assumed that there are two types of principles, generalizations (most things that have  $x, y, z$  are  $W$ ) and universalizations (all things that have  $x, y, z$  are  $W$ ). The discussion has been focused on the latter, understood as substantive rather than purely formal principles, so I will do the same here.<sup>5</sup> Generalism argues that principles of this sort, which subsumes the cases compared and guarantees the conclusion of the argument, are required, so that they must be included in the analysis as implicit premises (Beardsley 1975 [1955]; Waller 2001; Shecaira 2013; Botting 2017, 2022). Trudy Govier nicely explains the intuition behind this position. She characterises arguments by analogy as those that “draw a conclusion about one thing on the basis of a comparison of that thing and another” (Govier 1985, p. 350) and distinguishes two types: “inductive,” where the cases compared are real and the conclusion is a prediction, and “a priori,” where the source may be hypothetical and the conclusion is a decision on how to qualify the target. For the latter, she proposes the so-called “articulated model”:

1. A has  $x, y, z$ .
2. B has  $x, y, z$ .
3. A is  $W$ .
4. Therefore, B is  $W$ .

This scheme intentionally leaves the door open to the question of whether similarities  $x, y, z$  are relevant for  $W$ : “Whether two cases are alike in all relevant respects is something that is always open to further discussion” (Govier 1989, p. 143). However, someone might think that these arguments presuppose a premise such as (p) it is in virtue of  $x, y, z$ , that A is  $W$ . From this “modest supplementation of the articulated model” (*Ibid.*, p. 143) there is a very short step to a universal statement such as (p’) all things that have  $x, y, z$  are  $W$ . If we include (p’) as an implicit premise, we kill two birds with one stone: we solve the problem of similarity relevance at a stroke, and we explain arguments by analogy as simple deductions. This is what I call ‘plain generalism,’ and it is defended by authors such as Monroe Beardsley.

The main problem with plain generalism is openly pointed out by Beardsley: “What makes an analogical argument plausible is always a hidden generalization; but when we make that generalization explicit, we can throw away the rest of the analogy” (Beardsley 1975, p. 113).<sup>6</sup> In Govier’s scheme, if we include (p’) as a

<sup>5</sup> Another question is how we interpret these universalisations. As will be seen, I hold that they correspond to warrants, so I broadly subscribe Toulmin’s account of universal premises (Toulmin 2003, pp. 105–110).

<sup>6</sup> The same point has been made regarding so-called ‘figurative analogies’ (see Garssen 2009). “Figurative analogy argumentation is based on a metaphorical relation that serves as an indirect means of expressing a general rule which serves as a reason put forward in defense of the standpoint” (van Eemeren and Garssen 2014, p. 52). Once this principle is reached, the analogy becomes superfluous.

premise, we can deduce 4 without any information about the source case. It turns out that generalist recasting explains analogy so well that it makes it disappear. Another problem is that, in practice, arguers rarely state such a principle, and attributing it to them as an implicit premise is problematic, if not outright fallacious. Govier argues that this reconstruction is ad hoc, “appearing to be due only to a desire to look at argument through deductivist goggles” (Govier 1989, p. 145), as well as uncharitable, since it holds the arguer responsible for a principle that is generally less plausible than the conclusion of the argument (see also van Laar 2014, p. 92). A third problem is strength variations. Two things can be more or less similar to each other, so it seems reasonable that arguments by analogy are more or less strong depending on the relevant similarities and differences between the source and target cases (Guarini 2004, p. 159). But, if we conceive of arguments by analogy as deductions in disguise, variations in strength are, by definition, out of the picture. Finally, this position relies upon “the assumption that particular cases have to be known by having universal generalizations applied to them” (Govier 1989, p. 145), and this is a problematic epistemological stance, to say the least, for it makes the origin of such generalizations a sort of mystery (see also Wisdom 1991, pp. 47–48, and Marraud 2020a, p. 5).<sup>7</sup>

Other scholars have developed more elaborate analyses that attempt to solve these problems. Fabio Shecaira (2013), for example, proposes the following reconstruction:

1. It is true that *a*.
2. The most plausible (i.e., the best) reason for believing *a* is the principle *C*.
3. Therefore, it is true that *C*.
4. *C* implies *b*.
5. Therefore, it is true that *b* (Shecaira 2013, p. 429).

As can be seen, arguments by analogy are no longer single arguments, but structures composed of two arguments. The first is an abduction in which source case *a* is presented as a reason for principle *C*, and the second is a deduction in which target case *b* is entailed from principle *C*. This analysis seems to solve the problem pointed out by Beardsley, since the source information is not superfluous. Moreover, it can accommodate variations in strength, because the first part of the scheme is a non-deductive argument that can lend its conclusion different degrees of support. But a challenge remains: Although there is no doubt that these structures may be interesting on their own right, no direct comparison between source and target cases is made in them, so why should we conceive of them as arguments *by analogy*? It is indeed assumed that the source case and the target case are similar, if only because

<sup>7</sup> Jonathan Dancy makes a similar point regarding moral principles: “We certainly cannot hope to extract principles from our judgements about particular cases, because that sort of judgement is supposed to be based on principles. If judgement is subsumptive, it needs principles to start from, which cannot be got from further judgement on pain of a regress. But how else are we to distinguish true principles from false ones? It is not attractive to suppose that the true principles will somehow bear truth on their face, so that one only has to contemplate them long enough to tell that they are true. Nor is it attractive to suppose, as the subsumptive option does, that particular cases can never be tests for principles” (Dancy 2004, p. 5).

they fall under the same principle, but this similarity plays no role in the argument (see Juthe 2019, pp. 17–19).

The issue of principle reconstruction is addressed by Bruce Waller (2001). For him, arguments by analogy are based on an appeal to consistency: by resorting to the source case, a principle shared by interlocutors is elicited and from there the target case is deduced, which requires the same treatment for both cases. However, this does not imply that principles are “eternal verities set in stone, awaiting our certain discovery” (Waller 2001, p. 206). On the contrary, they can be refined and modified as particular cases arise that do not conform to previous formulations, something that Waller calls ‘thoughtful mutual adjustment.’ This makes principles allegedly underlying arguments by analogy more flexible and sensitive to variations depending on the context and, thus, more plausible. Furthermore, it sheds light on the process by which such principles are reached: there would be no epistemic priority of them over particular cases, but a constant thoughtful mutual adjustment. But again, problems remain: it makes no sense to speak of joint reconstruction of an already shared principle and, at the same time, of rational persuasion (Guarini 2004, pp. 155–156). In addition, once we recognize—as Waller and Shecaira do—that cases can function as reasons for principles, and that this does not in turn presuppose any principle as an implicit premise, a legitimate complain arises: why should these universal principles be necessary in arguments by analogy?

The task for the particularist is then to propose an account that dispenses with these principles in the explanation of arguments by analogy. In the face of this challenge, two questions arise: if we get rid of principles, (1) on what do we base arguments by analogy? And (2) is there any other role for principles in arguments by analogy?<sup>8</sup>

### 3 A Particularist Scheme

I have said that an analogy is a comparison between two objects or systems of objects that points out features in which they are thought to be similar. This characterisation encompasses two broad ways of understanding analogies (see Alhambra 2021, pp. 11–15). On the one hand, some contend that an analogy is a sort of aggregation of similarities between objects: the more properties two objects share, the more likely they are to be similar in other respects. On the other hand, others argue that analogy is not a comparison of objects, but of relationships, i.e., it is a

<sup>8</sup> For reasons of space, I have had to leave out two important particularist proposals. First, there is Lilian Bermejo-Luque, who responds to the challenges posed by Waller and Shecaira with her Linguistic-Normative Model of Argumentation. This model combines an adaptation of Toulmin model with the notion of modal qualifiers and makes it possible to defend a deductive yet non-principled scheme of arguments by analogy (Bermejo-Luque 2012, 2014). Secondly, André Juthe proposes a relational model based on a one-to-one correspondence between elements in the source that determine the predicate to be transferred and elements of the target. This allows him to account for arguments by analogy without recourse to universal principles (Juthe 2005, 2016, 2009) and answer the generalist criticism raised by David Botting (Botting 2017, 2022).

parallelism of relations. In the words of Paul Grenet, analogy is “a *resemblance of relationship* rather than a *relationship of resemblance*” (quoted by Perelman and Olbrechts-Tyteca 1971, p. 372). Here I will adopt this second position. The question, then, is what kind of relationships are compared in an argument by analogy?

### 3.1 Argumentation by Parity of Reasons

In cognitive sciences, Keith Holyoak and Paul Thagard have also defended a theory of analogy based on the notion of parallelism. They argue that analogical thinking is to “reason and learn about a new situation (the *target* analog) by relating it to a more familiar situation (the *source* analog) that can be viewed as structurally parallel” (Holyoak and Thagard 1997, p. 35). The process by which two situations are compared is called ‘mapping,’ namely “the construction of orderly correspondences between the elements of a source analog and those of a target” (Holyoak and Thagard 1997, p. 195). To understand what these elements are, it is necessary to pay attention to the work of Dedre Gentner, who first proposed a structure-mapping theory of analogy (see Gentner 1983). She makes a twofold syntactic distinction that is relevant here. On the one hand, she distinguishes between ‘object attributes,’ predicates that takes one argument (e.g., “María is Spanish”), and ‘relationships,’ predicates that takes two or more arguments (e.g., “John is *taller than* Peter”). And on the other hand, she distinguishes between first-order relationships, which takes objects as arguments (as in the previous one), and higher-order relationships, which takes propositions (e.g., “John will be selected for the basketball team *because* he is taller than Peter”, or “María has a better CV than John, *so that* she will receive the grant”). According to these authors, what differentiates analogy from mere similarity is that in analogy the comparison operates on higher-order relationships. Take the classic Platonic analogy: Just as a ship needs a captain to direct her course, so a state needs a good leader to set its agenda. Following Cameron Shelley (2004), we can analyse it using this Table 1.

As can be seen, the source and target cases appear in different columns. With respect to rows, three levels are set corresponding to objects, first-order

**Table 1** Representation of the ship-state mapping

<i>Ship (source)</i>	<i>State (target)</i>
Ship	State
Captain	Leader
Course	Agenda
Crew	Citizens
Well-being	Well-being
Need (ship, captain)	Need (state, leader)
Direct (captain, course)	Set (leader, agenda)
Enjoy (crew, well-being)	Enjoy (citizens, well-being)
Because (need, direct)	Because (need, set)
So-that (direct, enjoy)	So-that (set, enjoy)



relationships, and higher-order relationships. In light of this analysis, it is easy to see that Plato's analogy rests not so much on the similarities between objects—a ship and a state bear little resemblance to each other—, but on the parallelism of relationships between the element of both cases. The more relationships and the higher their order, the better the analogy, according to these theories.

So, we have that an analogy is a comparison between two systems of relationships, and that an argument by analogy is one in which that comparison is presented as a reason for assigning to one of them a property of the other. On the other hand, I have suggested that in arguing by analogy, we hold that a claim is supported by reasons because the case parallels another case in which it is accepted that a claim is supported by reasons. How can we combine these ideas? My suggestion is that by understanding higher-order relationships as argumentative relationships (see Marraud 2007 and Alhambra 2022). By argumentative relationship I mean the relation between the consideration that is presented as a reason and that for which that consideration is a reason. If we take this step, then we have that arguments by analogy are meta-arguments, i.e., arguments about other arguments, since the source and target cases are themselves arguments (see Woods and Hudak 1989; Marraud 2007; van Laar 2014, Stevens 2018 and Alhambra 2022).<sup>9</sup>

An example may shed light on this idea. In a report on the decision of the Supreme Court of Virginia (USA) to remove the statue of Confederate General Robert E. Lee, reporter Gregory S. Schneider collects the testimony of Janice Hall Nuckolls, a citizen who lives near the statue. Asked what to do with the base on which the statue stands, she replies as follows:

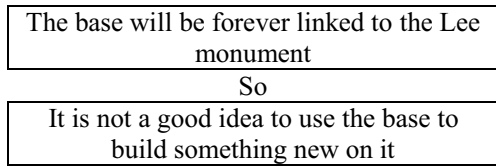
“The base will be forever linked to the Lee monument, no matter how much paint is on it,” she [Janice Hall Nuckolls] said. “Having to start with that would be like being given a canvas to paint but being told to work with the painting that has already been started by someone else. And it’s not a good painting” (Schneider 2021)

In the first line, Nuckolls seems to answer the question posed by Schneider, which could be formulated as “Do you think it is a good idea to use the base to build on?” If we assume that she is being collaborative here, this reply can be seen as a reason to take a negative stance on the issue. If so, we can reconstruct her move as an argument (Fig. 2).

In the second sentence, Nuckolls makes a comparison between the monument case and the canvas case. This is an analogy, as the expression “that would be like” suggests (see Snoeck Henkemans 2003, p. 971, or Doury 2009, p. 148), but the question is, in what sense are both situations analogous to each other? It cannot be

<sup>9</sup> A question arises here: are all arguments by analogy meta-arguments? Although I am not very interested in the terminological wrangling, I think it could be useful to reserve the notion of ‘arguments by analogy’ for this type of arguments and to use ‘arguments by comparison’ or ‘argument by similarity’ as a more general category (see Juthe 2005, p. 7; Alhambra 2023). In any case, it is important to keep in mind that I am not trying to defend a sort of universal theory of arguments by analogy, but rather a model that accounts for cases in which these higher-order relationships are compared.

Fig. 2 Monument argument



because the base of a monument and a canvas are similar objects, as they seem quite different in principle. Nor can it be because the sentences compared express true propositions, since the canvas case is hypothetical, as the verb tense suggests. I contend that this is so because the considerations mentioned in both situations are argumentatively oriented towards parallel claims. If this is correct, the canvas case can be reconstructed as a parallel argument (Fig. 3).

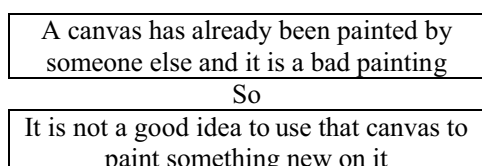
Thus, what Nuckolls is doing here is to argue that the consideration put forward for removing the monument base is a worthwhile reason because it parallels the consideration put forward for not using the canvas—which is supposed to be a worthwhile reason. We have then an argument about other arguments.

Nevertheless, it has to be noted that not all aspects of the arguments compared play the same role in Nuckolls' argumentation: it makes no difference, as far as the analogy is concerned, whether there is in fact a canvas that has been painted or whether it should not actually be painted on it (note again that it is a hypothetical case). What matters here are the relationships between the considerations presented as reasons and the claims those consideration favour in each situation. As said, these relationships can be expressed by resorting to conditionals. Thus, we can simplify Nuckolls' argumentation as follows (Fig. 4).

“Being analogous” must be read here as “being parallel.” We can resort to the typical expression of a parallelism and say something—much more cumbersome—like this: ‘The base will be forever linked to the Lee monument’ is to ‘it is not a good idea to use the base to build something new on it’ as ‘a canvas has already been painted by someone else and it is a bad painting’ is to ‘it is not a good idea to use that canvas to paint something new on it.’

It is worth clarifying what I call here ‘analogy.’ This term is often used interchangeably to refer to at least three different things: (1) the parallelism itself, which here I represent together with the ‘so’ as the ground of the reason; (2) the justification of the conditional associated with the target that relies on such parallelism (i.e., the whole diagram); and (3) the argumentative operation which such justification is part of. In this sense, as we are going to see, arguments by analogy can be seen as a

Fig. 3 Canvas argument



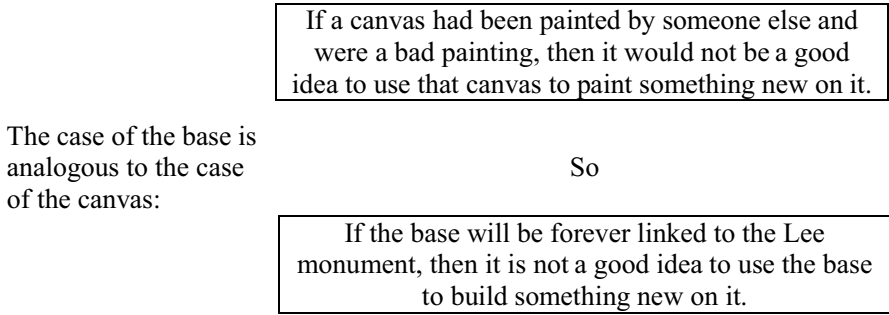


Fig. 4 Monument-canvas argumentation by analogy simplified

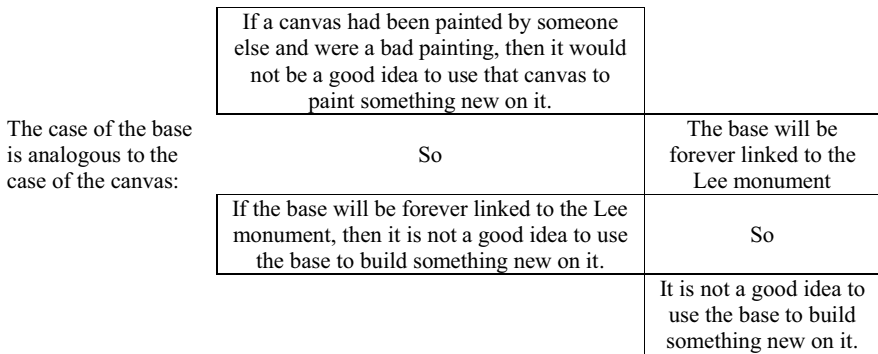


Fig. 5 Justification of the premise-conclusion relationship of the monument argument

substitute for warrants: in order to explain or justify the ‘step’ from the premises to the conclusion of a given argument, we can either provide a general rule or compare it with a similar one about which there is no doubt. The following diagram represents this argumentative operation (Fig. 5).

I will call (1) ‘analogy’ and (2) ‘argument by analogy.’ I do not have a term for (3), so when I want to refer to it, I will state it explicitly. This distinction allows me to easily accommodate cases where the analogy is used, not to support, but to attack the step from the premises to the conclusion of a given argument. In these cases, the parallelism is the same, but instead of the conditional associated with the source being asserted in the premise, it is denied.<sup>10</sup>

If we use Shelley’s table to represent the mapping between the canvas and the monument situation (Table 2), we can appreciate the similarity with Plato’s analogy.

<sup>10</sup> Here is an example: When people tell him they don’t fear surveillance because they have nothing to hide, Snowden says he tells them: “Arguing that you don’t care about privacy because you have nothing to hide is like arguing that you don’t care about free speech because you have nothing to say” (Schrodt 2016). I call this ‘counterargument by analogy’. For more on this see (Govier 1985; Juthe 2009; Leal and Marraud 2022).

**Table 2** Representation of the monument-canvas mapping

<i>Canvas (source)</i>	<i>Monument (target)</i>
Canvas	Base
Bad painting	Controversial statue
Painter	Sculptor
New painting	New statue
Bound-to (bad painting, canvas)	Bound-to (controversial statue, base)
Not-paint-on (painter, new painting, canvas)	Not-build-on (sculptor, new statue, base)
Because (not-paint-on, bound-to)	Because (not-build-on, bound-to)

Now we can answer the question arisen at the beginning of this section: the relationships compared in an argument by analogy are argumentative relationships. I will call this variety of argumentation by analogy ‘argumentation by parity of reasons’ and propose the following (simplified) scheme (Fig. 6).

### 3.2 Argumentation by Parity of Weighings

Arguments by analogy are thus based on a comparison of argumentative relationships. But this is not the whole story. They may be more complex and also operate upon what I will call ‘inter-argumentative relationships,’ i.e., relations between reasons. Let us consider another example. The following excerpt is from an article entitled “The Hitler Analogy,” published in *The New York Times* a few days after Iraq’s invasion of Kuwait:

The most excruciating choice faced by ethical people is called triage. When a field hospital is overwhelmed with casualties, someone has to decide which of the wounded can be saved before allocating scarce medicine and treatment –denying it to those with little chance of survival.

If anyone wondered whether the analogy of Saddam Hussein to a predecessor aggressor and mass murderer, Adolf Hitler, might be an exaggeration, all doubt was removed yesterday when the Iraqi dictator forced the world to triage.

He assembled a roomful of English-speaking women and children he held prisoner. Television cameras recorded the fear of the parents and teachers and the uncomprehending boredom of the children as the smiling “Butcher of Baghdad” dangled them before the world as the first to be sacrificed when the civilized world launched its counterattack. [...]

**Fig. 6** Scheme for argumentation by parity of reasons

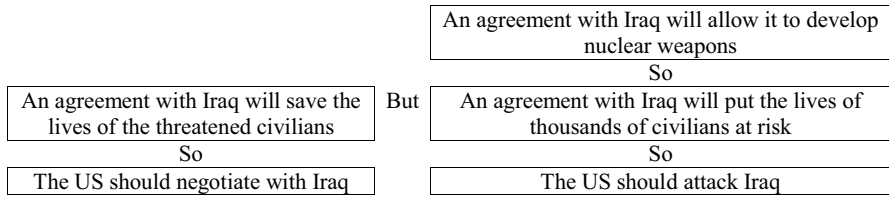


Fig. 7 Saddam Argumentation

Triage is inescapable: if we negotiate with the kidnapper, we would save the lives of these children –at the cost of tens of thousands, perhaps millions, of other children sure to be incinerated when Saddam acquires nuclear bombs. (Safire 1990)

This text appeared on a page dominated by the headline: “Should the U.S attack Iraq?” The author, William Safire, seems to take a favourable stance and justifies it by comparing Saddam Hossein to Adolf Hitler. But the question is: what do the target and source cases in this analogy consist of? According to Safire, Hossein had “forced the world to triage.” A triage is an operation in which an agent decides how to allocate resources in a situation of scarcity. In typical cases, this takes the form of a dilemma: the doctor has to decide whether or not to treat a patient by weighing considerations such as the type of injuries, the chances of survival, the drugs available, the expected duration of the situation, and so on. In the case at hand, the dilemma is whether or not the US should attack Iraq, and the considerations weighed are two: that negotiating with Saddam will save the lives of the threatened civilians, and that this will endanger the lives of thousands, perhaps millions, of others, since it will allow Saddam to develop nuclear weapons. This dilemma parallels the one the UK and France faced when Hitler annexed Czechoslovakia in 1938: negotiate with Germany and avoid war now, or attack it and avoid further annexations. To support his position, Safire draws on the commonly accepted view that Neville Chamberlain’s policy of Appeasement was a miscalculation.

What is interesting in this case is that the subject of the analogy is not arguments, as in Nuckolls’ example, but weighings of reasons for opposite claims. I said that in argument dialectics this is called refutation, i.e., a counterargument in which a stronger reason is given for an incompatible claim. Connectors such as ‘but,’ ‘however,’ or ‘although’ are often refutations marks. Using ‘but’ as the standard connector for refutations,<sup>11</sup> we can depict Safire’s position as follows (Fig. 7).

In order to justify the attribution of weight expressed by the connector ‘but,’ Safire appeals to the Hitler case, which can be represented as follows (Fig. 8).

The following diagram depicts Safire’s whole argumentation (to simplify the diagram I do not represent the chaining of reasons) (Fig. 9).

<sup>11</sup> Here I am following the definition proposed by Hubert Marraud: “in many cases when someone utters *A but B* she means that (1) she accepts *A*, (2) she accepts *B*, (3) *A* is a reason for some conclusion *C*, (4) *B* is a reason for some conclusion *C*’ incompatible with *C*, and (5) in the situation of utterance, *B* outweighs *A*” (Leal and Marraud 2022, p. 316).

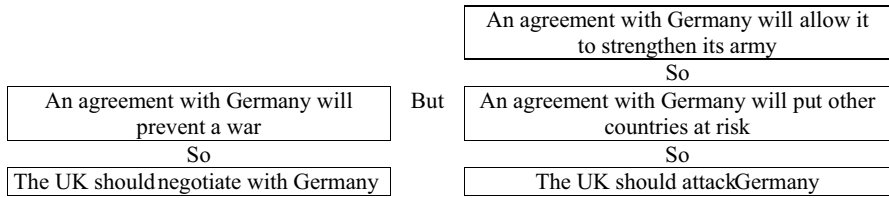


Fig. 8 Hitler Argumentation

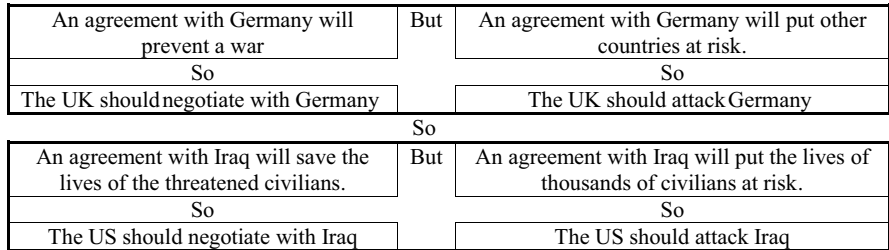


Fig. 9 Saddam-Hitler argumentation by analogy

We can appreciate the difference with Plato’s and Nuckolls’ examples by adding an extra level of rows to Shelley’s table (again, I omit here the chaining of reasons) (Table 3).

I will call these second variety of argumentation by analogy ‘argumentation by parity of weighings’ and propose the following scheme<sup>12</sup> (Fig. 10).

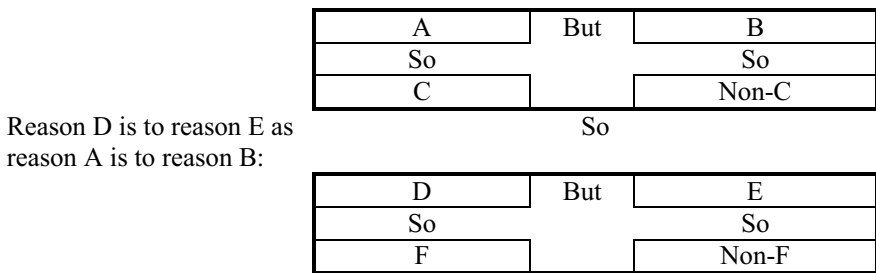
### 3.3 Logical Properties

We have then two varieties of argumentation by analogy. Both are arguments about other arguments: the arguer defends that a claim is supported by reasons because the case is parallel to another case in which a claim is supported by reasons. The difference is that while in Nuckolls’ case it is argued that the claim is supported by a worthwhile reason, in Safire’s case it is argued that the claim is supported not only by a worthwhile reason, but by one that is stronger than a reason against. In other words, while in Nuckolls’ case the property transferred from the source to the target is ‘to pose a *pro tanto* reason,’ in Safire’s case it is ‘to pose a relatively strong reason.’

<sup>12</sup> Here I have focused on operations in which reasons favouring incompatible claims are weighed, but in principle there is no constraint to the complexity of the elements compared. Thus, the source and the target cases may be constituted by another combination of reasons, as in subordinate, coordinative or multiple argumentations, to use pragma-dialectical terminology. For the analysis of a more complex case, see (Marraud 2021, pp. 181–184) or (Alhambra 2022, pp. 776-780).

**Table 3** Representation of the Saddam-Hitler mapping

<i>Hitler case (source)</i>	<i>Saddam case (target)</i>
The UK	The US
Germany	Iraq
Agreement	Agreement
War	Threatened civilians
Army	Nuclear weapons
Other countries	Thousands of civilians
Negotiate with (The UK, Germany)	Negotiate with (The US, Iraq)
Prevent (agreement, war)	Save (agreement, threatened civilians)
Put at risk (agreement-other countries)	Put at risk (agreement-thousands of civilians)
Attack (The UK, Germany)	Attack (The US, Iraq)
Because <sup>1</sup> (negotiate, prevent)	Because <sup>1</sup> (negotiate, save)
Because <sup>2</sup> (attack, put at risk)	Because <sup>2</sup> (attack, put at risk)
But (Because <sup>1</sup> , because <sup>2</sup> )	But (Because <sup>1</sup> , because <sup>2</sup> )



**Fig. 10** Scheme for argumentation by parity of weighings

From the perspective of argument dialectics an argument is correct and poses a *pro tanto* reason if it withstands objections and rebuttals, and it is conclusive and poses a relatively strong (or all things consider) reason if it also resists refutations. As we have seen, an objection is an argument whose conclusion is incompatible with some premise of the criticised argument; a rebuttal is an argument whose conclusion attacks the relationship between the premises and the conclusion of the criticised argument, and a refutation is an argument that gives a stronger reason for an incompatible conclusion. So, both ‘to be a *pro tanto* reason’ and ‘to be a stronger reason’ are properties that are defined with respect to an argumentative context. In this sense, argumentation by parity of reasons can be seen as a response to (actual or possible) rebuttals, and argumentation by parity of weights as a response to (actual or possible) refutations. In the first variety it is argued that the target argument resists rebuttals, because it parallels the source argument which—it is taken for granted—does so. And in the second variety it is argued that the target argument resists refutations, because it parallels the source argument which—it is taken for granted—does so.

In short, by conceiving of arguments by analogy as based on a parallelism of relationships, we keep comparison as the key element of these arguments; and by differentiating types of relationships according to their order, we provide a more accurate analysis of how people justify their positions by analogy.

## 4 Evaluation and Principles

The account that I have just presented is clearly particularist. It does not resort to any universal principle that covers the source and target cases and turns the argument into a deductive one, neither full nor partial. Arguments by analogy are case-to-case arguments based on a parallelism of relationships. We can recognise similarities between ways of arguing and using them as reasons to justify our own arguments. However, someone might reply that what I have just presented is an analysis, but that generalism and particularism are theories of evaluation. The question is not so much whether these arguments are in fact principled, but whether they can be evaluated without recourse to principles of any kind. To respond, I will rely on a suggestion made by Govier:

My position [...] is that some U-claim [i.e., universal claim] is implied when we reason from case to case. But we often do not know exactly what the U-claim is. And very often, we can evaluate the argument without raising the issue, just by sticking to the cases at hand. We can point out relevant differences between A and B and show how they undermine the conclusion without addressing the U-claim as such (1989, p. 148).

Two questions arise here: first, what does it mean that the universal principle is “implied” by the argument by analogy? And second, what are these relevant differences in the sort of arguments by analogy that I am interested in? The answer to the latter will give us the key to answer the former.

### 4.1 A Particularist Evaluation Procedure

Let us start with the basics, what would these principles look like in my account? One thing that sets me apart from many of those who have discussed this issue is that I advocate a meta-argumentative approach. In my view, when we argue by analogy, we contend that a claim is favoured by reasons, because the case is parallel to a case in which we assume that another claim is favoured for other reasons. This meta-argumentative character allows me to incorporate analogies into the logical evaluation of arguments. Take Nuckolls’ case. She claims that the argument “the base will be forever linked to the Lee monument, so it is not a good idea to use the base to build something new on it” raises a worthwhile reason, in the sense that the relationship between the premises and the conclusion is beyond doubt. As we have seen, to



do so she relies on the comparison with the canvas case (see Fig. 5 above). But if we take a closer look at it, it will dawn on us that this is precisely the job of warrants.<sup>13</sup> Instead of arguing by analogy, Nuckolls could have said something along the lines of “because if something is forever linked to a negative idea, it is better not to use it as a starting point for a new thing.” In short, arguments by analogy thus understood can be regarded as a substitute for warrants. However, there are two readings of this idea, which reproduce the debate between generalism and particularism:

1. Two arguments are analogous because they follow the same principle or rule, or
2. Two arguments can be considered as following the same principle or rule because they are analogous (*see* Marraud 2020a, p. 5).

The former is the generalist approach, which conceives general rules as a prerequisite for the recognition of similarities between cases, while the latter proceeds the other way around. Of course, both positions are open to nuance. Generalists might say that warrants are implicit in some way and, in any case, can be refined and modified on the fly; and particularists might argue that we often—or even mostly—argue using warrants, but that there are argumentative practices that do not require them, and arguments by analogy may be part of those practices (see Lamond 2005). The problem is the same with argumentation by parity of weighings, but at a higher level: now we have principles or rules that attribute more strength to one reason than to another. In fact, a particularist might take advantage of this specificity and argue that, although at the level of warrants generalism has some plausibility, a principle or rule of the second type is a hard pill to swallow, because the strength of reasons is largely determined by contextual factors.

The question is then how to evaluate these arguments without resorting to warrant-like principles. Following Govier, the answer is quite simple: by looking for relevant differences between the cases compared. But what is a relevant difference here? Well, the same as a relevant similarity but in reverse, as it were. In the first section I advanced the idea that depending on the property to be transferred, the comparison will highlight different aspects of the source and the target cases. Something similar happens with differences. If the arguer contends that a claim is favoured by worthwhile reasons, then relevant differences will be those considerations that show either in the source or in the target that this does not really happen. This is done, in argument dialectics, by looking for rebuttals to the reasons posed by the source and target arguments. In Nuckolls’ case, for example, someone could reply that regarding the Lee monument, it is essential for the US not to forget its past, however painful it may be, whereas this need not be the case with the canvas. This consideration, if true, is relevant because it attacks the relationship between the premise and the conclusion of the target argument, that is to say, the aspect in which the two situations are said to be similar. We can depict this idea as follows (Fig. 11).

<sup>13</sup> As is well known, Toulmin characterises warrants as “general, hypothetical statements, which can act as bridges, and authorise the sort of step to which our particular argument commits us” (2003, p. 91).

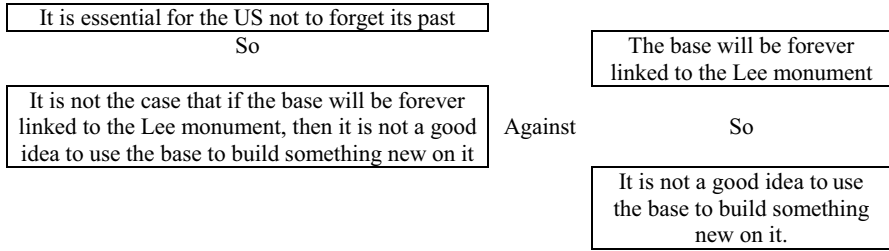


Fig. 11 Rebuttal of the monument argument

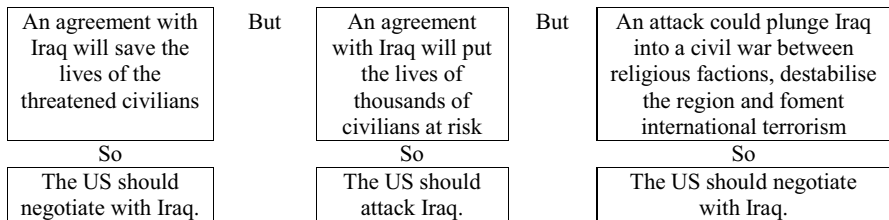


Fig. 12 Refutation of the Saddam argumentation

If this is actually so, we will have found a relevant difference between the source and target cases and, thereby, shown that the parallelism on which the argument was based was not such after all.

On the other hand, if the arguer contends that a claim is favoured by relatively strong reasons, relevant differences will be those considerations which alter the weight given by the arguer to the reasons considered, either in the source or in the target case. Here we are looking for refutations or contextual factors that shift the balance of reasons. In this case we can picture the following response by a negotiation advocate: “I see your point, but what you have not considered is that attacking Iraq could have other undesirable consequences. For example, it could plunge the country into a long civil war between religious factions, destabilise the region and foment international terrorism.” In so arguing, the negotiation advocate would be pointing to a consideration that is supposedly present in the target case but not in the source case. This consideration would be relevant because it changes the weighing of reasons in the target case; if those considerations were true, we would have stronger reasons to defend that the US should seek a peaceful settlement of the conflict. We can represent this idea as follows (Fig. 12).

Thus, bearing in mind that what is a relevant difference depends on what is being defended, the evaluation of arguments by analogy would go along these lines (Table 4).

In short, we have a procedure that does not resort to universal principles or general rules and therefore avoids generalism problems. This procedure is case-driven: depending on the property to be transferred in the case at hand, the analogy will highlight some relationships or others, and that gives us the key to look for relevant

**Table 4** An evaluation procedure for argumentation by analogy

- 
1. Someone argues by analogy, and we want to evaluate if the reason given is good
  2. We identify the variety by looking at the arguer's claim
  3. We search for counterarguments:
    - 3.1. Should it be the first variety, search for rebuttals either to the source or to the target
    - 3.2. Should it be the second variety, search for refutations or contextual factors that alter the strength of reasons considered either in the source or in the target
  4. We set the outcome:
    - 4.1. Should it be any counterargument, the argument by analogy is incorrect and fails to pose any reason
    - 4.2. Should it be no counterargument, the argument by analogy can be considered correct and that it poses at least a *pro tanto* reason
- 

differences, i.e., adequate counterarguments. Of course, these are only broad guidelines, and so it should be: at the end of the day, particular cases rule and, to crib from Govier again, whether two cases are similar—or different—in relevant respects is something that is always open to further discussion.

## 4.2 Principles as By-product of Analogies

If my thesis is correct, and we can evaluate arguments by analogy thus understood without recourse to any universal principle or general rule, “simply by sticking to the cases at hand,” then the question arises: In what sense is the universal principle *implied* by the argument by analogy? Govier does not make it easy here. She contends that the universal principle is neither a background assumption (an example being the principle of non-contradiction in deductive logic), nor an implicit premise. And yet it is somehow implied by the arguer: “the use of an argument by analogy does commit the arguer to some U-claim in the sense that if what she says in her argument is right, then some U-claim must be true” (Govier 1989, p. 148). My position on this is that, if the argument by analogy is good (in the sense I have just outlined), then it can be used *as a reason for* a general rule that can be applied to both cases. In other words, these general rules should be seen as a by-product of good analogies, not the other way around.<sup>14</sup>

This is particularly clear in cases where the very rule on which the consideration put forward is supposed to be grounded is systematically rejected. In these situations, the only way out of the *impasse* may be to argue by analogy (see Woods and Hudak 1989, p. 128). John Wisdom (1991 [1957]) points to the same idea and argues that, when this happens, the justification of the relationship between the premises and the conclusion “comes to no more than a case-by-case procedure” (Wisdom 1991

---

<sup>14</sup> It goes without saying that these rules can no longer be understood as universal principles, as Govier seems to concede, but rather as contributory standard that allow for exceptions. Otherwise, a counterexample to the rule that the analogy supposedly favours could be seen as an attack on the analogy itself, and the particularist account would collapse into a deductive one. Thanks to one of the reviewers for pointing out this problem. For the relation between contributory principles and analogy see (Guarini 2010, p. 95); for the problem with universal principles see (Juthe 2009, p. 35., note 43).

[1957], p. 85). This leads him to defend that, although there are in fact other types of arguments—he is still thinking on the dichotomy deductive/inductive—, they all can be reduced to arguments by analogy (see *Ibid.*, pp. 47–48). Stephen Toulmin (1966) makes a similar point, although he does not go as far as Wisdom. Commenting on Dudley Shapere’s work on the plausibility of scientific theories, he makes a distinction between arguments that apply a given concept, principle or method to a particular instance, and arguments “by which the very applicability of such a concept (principle, method) *is established*, having initially been disputed” (Toulmin 1966, p. 626). The latter are commonly based on appeals to precedent, analogy or other types of what he calls “case law,” since “the moment the ultimate relevance of that particular theory is challenged, the debate falls back—necessarily, since *what else is there?*—on appeals to precedent” (*Ibid.*, p. 626—emphasis added).

An example may shed light on this idea. In Chapter 2 of *Living Words* (2014), Peter Ludlow addresses the discussion—which he describes as a metalinguistic disagreement—on the notion of ‘rape’ in the 1970s in the United States. At that time, the law did not consider sexual assaults within marriage as cases of rape. The strategy of those who argued that marital rape should also be punished was to draw analogies between accepted and novel cases. Once this was done, the next step was to defend the analogy against the criticisms (i.e., the allegedly relevant differences) raised by the defenders of the existing law. For example, it was argued (1) that by accepting marriage the woman consented to such sexual intercourses, (2) that by becoming a wife she ceased to be a subject of rights, or (3) that the psychological impact was less in cases of marital rape. Proponents of the analogy (counter) argued that (1) and (2) gave the lie to any concept of equality and human dignity, and that (3) was just false, as there were studies showing just the opposite. In short, both sides argued about what the relevant similarities and differences were. To say, as generalism would have it, that the rule being defended is part of the argument being put forward to defend it is uncharitable, to say the least.

Thus, we have that arguments by analogy operates on a case-to-case basis, and only when they have been evaluated by looking at relevant similarities and differences between cases compared, we can take them as a reason for a general rule. If this is so, Govier’s claim is qualified in two important ways. First, good arguments by analogy do not *imply* but can *favour* (or be reasons for) general rules, and as it is well known, reasons can be both defeated and overcome by stronger reasons (see Alhambra 2022, p. 766). And secondly, arguments by analogy need not always lead to a defence of a general rule, as the verb ‘imply’ seems to suggest. Sometimes we simply move at the level of cases without any intention of generality, and without commit ourselves with any general rule.

## 5 Conclusions

Generalism and particularism give opposite answers to the question of whether arguments by analogy need principles to support their claim. For generalism, these arguments presuppose a principle that attributes the property to be transferred to any object having the features shared by the source and the target cases, which makes the argument

a deduction, either full or partial. Particularism rejects this position and argues that arguments by analogy are case-to-case arguments based on the similarities and differences between the source and target cases. Here I have defended a particularist position.

First, I have shown that arguments by analogy operates on a parallelism of relationships. These relationships are argumentative in nature, which turns arguments by analogy into meta-arguments, i.e., arguments about other arguments. I have shown that argumentative relationships may be of different sorts, giving rise to different varieties of arguments by analogy. Here I have distinguished two varieties: argumentation by parity of reasons and argumentation by parity of weighings. Second, I have shown that at this meta-argumentative level general principles correspond to Toulminian warrants. Generalists contend that every argument, including arguments by analogy, require a warrant in order to be evaluated, while particularists argues that there are argumentative practices that indeed require warrants, but others that do not, and arguing by analogy may be part of the latter. Finally, I have proposed a procedure for evaluating arguments by analogy without recourse to warrant-like rules, and have argued that, rather than being a requirement of arguments by analogy, those rules can be seen as a by-product of good analogies, especially in cases where they are called into question.

**Acknowledgements** This work has been possible thanks to a grant for Research Staff Training of University Autonomous of Madrid (FPI-UAM -for its Spanish acronym) and the project *Argumentative Practices and Pragmatics of Reasons* (PGC 2018-09594-B-100) of the Spanish Ministry of Science, Innovation and Universities. A first version of this paper was discussed at the IV European Conference on Argumentation in Rome. I would like to thank my commentator, Jean Wagemans, for his comments.

**Funding** Open Access funding provided thanks to the CRUE-CSIC agreement with Springer Nature.

## Declarations

**Conflict of interest** There is no conflict of interest (financial or non-financial).

**Human and Animals Rights** The research does not involve human participants or animals, so informed consent and a statement on welfare of animals is not applicable.

**Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

## References

Alhambra, José. 2022. Argumentation by Analogy and Weighing of Reasons *Informal Logic* 42(4): 749–785. <https://doi.org/10.22329/il.v42i4.7143>

- Alhambra, José. 2021. El argumento por analogía en la teoría de la argumentación (Argument by Analogy within Argumentation Theory). *Quadripartita Ratio* 5(10): 1–20
- Alhambra, José. 2023. Argumentación por comparación (Comparison Argumentation). *Revista Iberoamericana de Argumentación* 0(24): 1–31.
- Bartha, Paul F. A. 2010. *By Parallel Reasoning. The Construction and Evaluation of Analogical Arguments*. Oxford: Oxford University Press.
- Beardsley, M. 1975. *Thinking Straight*. Englewood Cliff: Prentice Hall.
- Bermejo-Luque, Lilian. 2012. A Unitary Schema for Arguments by Analogy. *Informal Logic* 32 (1): 1–24.
- Bermejo-Luque, Lilian. 2014. Deduction without Dogmas: The Case of Moral Analogical Argumentation. *Informal Logic* 34 (3): 311–336.
- Botting, David. 2017. The Cumulative Force of Analogies. *Logic and Logical Philosophy* 17 (3): 1–37.
- Botting, David. 2022. Deductive Analogy Defended (En defensa de la analogía deductiva). *Revista Iberoamericana De Argumentación* 23: 1–22.
- Dancy, Jonathan. 2004. *Ethics without principles*. Oxford New York: Clarendon Press, Oxford University Press.
- Doury, M. 2009. Argument Schemes Typologies in Practice: The Case of Comparative Arguments. In *Pondering on Problems of Argumentation: Twenty Essays on Theoretical Issues*, ed. F.H. van Eemeren and B. Garssen, 141–155. Dordrecht: Springer.
- Garssen, Bart. 2009. Comparing the Incomparable: Figurative Analogies in a Dialectical Testing Procedure. In *Pondering on Problems of Argumentation*, ed. Frans H. van Eemeren and Bart Garssen, 133–140. Dordrecht: Springer Netherlands.
- Gentner, Dedre. 1983. Structure-Mapping: A Theoretical Framework for Analogy. *Cognitive Science* 7 (2): 155–170.
- Govier, Trudy. 1985. Logical Analogies. *Informal Logic* 7 (1): 27–33.
- Guarini, Marcello. 2004. A Defence of Non-deductive Reconstructions of Analogical Arguments. *Informal Logic* 24 (2): 153–168.
- Guarini, Marcello. 2010. Understanding Blended Multi-Source Arguments as Arguments from Partial Analogies. *Ratio Juris*. 23 (1): 65–100.
- Hesse, Mary. 1966. *Models and Analogies in Science*. Notre Dame: University of Notre Dame Press.
- Holyoak, Keith J., and Paul Thagard. 1997. The Analogical Mind. *American Psychologist* 52 (1): 35–44.
- John, Woods Brent, Hudak (1989) By Parity of Reasoning *Informal Logic* 11(3). <https://doi.org/10.22329/il.v11i3.2627>
- Juthe, André. 2016. “Argumentation by Analogy: A Systematic Analytical Study of an Argument Scheme”, Dissertation, University of Amsterdam, The Netherlands.
- Juthe, André. 2019. “A Defense of Analogy Inference as *Sui Generis*”, *Logic and Logical Philosophy*, 1–51.
- Juthe, André. 2005. Arguments by Analogy. *Argumentation* 19: 1–27.
- Juthe, André. 2009. Refutation by Parallel Argument. *Argumentation* 23 (1): 133–169.
- van Laar, Jan Albert. 2014. “Arguments from Parallel Reasoning”. In: Henrique Jales Ribeiro (ed.) *Systematic Approaches to Argument by Analogy*. Amsterdam: Springer, pp. 91–107.
- Lamond, Grant. 2005. Do precedents create rules? *Legal Theory* 11 (1): 1–26.
- Leal, Fernando, and Hubert Marraud. 2022. *How Philosophers Argue. An Adversarial Collaboration on the Russell-Copleston Debate*. Switzerland: Springer.
- Ludlow, Peter. 2014. *Living Words*. Oxford: Oxford University Press.
- Marraud, Hubert. 2020a. “A Modest Proposal for Classifying the Theories of Argument”. Unpublished. Retrieved from: [https://www.academia.edu/44808846/A\\_MODEST\\_PROPOSAL\\_FOR\\_CLASSIFYING\\_THE\\_THEORIES\\_OF\\_ARGUMENT](https://www.academia.edu/44808846/A_MODEST_PROPOSAL_FOR_CLASSIFYING_THE_THEORIES_OF_ARGUMENT)
- Marraud, Hubert. 2020b. “Holism of Reasons and its Consequences for Argumentation Theory”. In C. Dutilh Novaes et al., *Reasons to Dissent. Proceedings of the 3rd ECA Conference*. London: College Publications: 167–180.
- Marraud, Hubert. 2022. “An Unconscious Universal in the Mind is Like an Immaterial Dinner in the Stomach. A Debate on Logical Generalism (1914–1919)”. *Argumentation*, pp. 1–25.
- Marraud, Hubert. 2007. La analogía como transferencia argumentativa. *Theoria* 59: 167–188.
- Mckeever, Sean and Ridge, Michael. 2006. *Principled Ethics. Generalism as a Regulative Ideal*. Oxford: Oxford University Press.
- Perelman, Chaïm and Olbrechts-Tyteca, Lucie. [1958] 1971. *The New Rhetoric. A Treatise on Argumentation*. Notre Dame: University of Notre Dame Press.

- Safire, William. 1990, August 24. "The Hitler Analogy". *The New York Times*. URL accessed 15 December 2022: <<https://www.nytimes.com/1990/08/24/opinion/essay-the-hitler-analogy.html?searchResultPosition=6>>.
- Schneider, Gregory S. 2021, September 2. "Virginia Supreme Court Clears Way for Lee Statue in Richmond to Come Down". *The Washington Post*. URL accessed 15 December 2022: <[https://www.washingtonpost.com/local/virginia-politics/lee-statue-richmond-court-removal/2021/09/02/4a2ee794-0bee-11ec-a6dd-296ba7fb2dce\\_story.html](https://www.washingtonpost.com/local/virginia-politics/lee-statue-richmond-court-removal/2021/09/02/4a2ee794-0bee-11ec-a6dd-296ba7fb2dce_story.html)>.
- Schrodt, Paul. 2016, September 15. "Edward Snowden just made an impassioned argument for why privacy is the most important right". *Insider*. URL accessed 23 December 2022: <<https://www.businessinsider.com/edward-snowden-privacy-argument-2016-9?IR=T>>.
- Shecaira, Fábio. P. 2013. Analogical Arguments in Ethics and Law: A Defence of a Deductivist Analysis. *Informal Logic* 33 (3): 406–437.
- Shelley, Cameron. 2004. Analogy Counterarguments: A Taxonomy for Critical Thinking. *Argumentation* 18: 223–238.
- Snoeck Henkemans, A. F. 2003. "Indicators of analogy argumentation". In F. H. van Eemeren, J. A. Blair, C. Willard, & A. F. Snoeck Henkemans (Eds.), *Proceedings of the Fifth Conference of the International Society for the Study of Argumentation*. Amsterdam: SicSat: 969–973
- Stevens, Katharina. 2018. Case-to-Case Arguments. *Argumentation* 32 (3): 431–455.
- Toulmin, Stephen E. 1966. The Plausibility of Theories. *The Journal of Philosophy* 63 (20): 624–627.
- Toulmin, Stephen E. 2003. *The uses of argument*. New York: Cambridge University Press.
- Trudy, Govier. 1989. Analogies and Missing Premises. *Informal Logic* 11 (3): 141–152.
- van Eemeren, Frans H., and Bart Garssen. 2014. Argumentation By Analogy in Stereotypical Argumentative Patterns. In *Systematic Approaches to Argument by Analogy*, ed. Henrique Jales Ribeiro, 41–56. Dordrecht: Springer International Publishing.
- Waller, Bruce. 2001. Classifying and Analyzing Analogies. *Informal Logic* 21 (3): 199–218.
- Wenzel, Joseph. 2006. Three Perspectives on Argument. Rhetoric, Dialectic, Logic. In R. Trapp, and J. H. Schuetz (eds.), *Perspectives on Argumentation: Essays in Honor of Wayne Brockriede*, pp. 9–26. New York: Idebate Press.
- Wisdom, John. 1991. *Proof and Explanation The Virginia Lectures*. Maryland: University Press of America.

**Publisher's Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.