VIRTUOUS NORMS FOR VISUAL ARGUERS

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Abstract. This paper proposes that virtue theories of argumentation and theories of visual argumentation can be of mutual assistance. An argument that adoption of a virtue approach provides a basis for rejecting the normative independence of visual argumentation is presented and its premisses analysed. This entails an independently valuable clarification of the contrasting normative presuppositions of the various virtue theories of argumentation. A range of different kinds of visual argument are examined, and it is argued that they may all be successfully evaluated within a virtue framework, without invoking any novel virtues.

1. Introduction

For at least twenty years, various approaches to visual aspects of argumentation have been the focus of a thriving research programme (Birdsell and Groarke, 1996, 2007; Kjeldsen, 2015; Groarke et al., 2016). More recently, virtue-based approaches to various aspects of argumentation have become the focus of another thriving research programme (Mohammed and Lewiński, 2014; Aberdein and Cohen, 2016). However, these two programmes have, so far as I can determine, been pursued independently. In some respects this is a missed opportunity, since the programmes have points of congruence. In particular, the normativity of argumentation has a particular significance for both programmes. Norms of argumentation are standards that individual arguments may or may not meet. Visual argumentation revisits what counts as an argument, and must therefore reassess if the old norms still hold; virtue theories of argument revisit what counts as a norm, and must therefore reassess how the old arguments stand. Furthermore, although there are still plenty of sceptics about virtues and visuals, both programmes have now achieved enough maturity that the burden of proof might be said to have shifted onto their critics. The central question for visual argumentation is no longer can pictures argue, but *how* do pictures argue; the

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central question for virtue argumentation is not are virtues relevant to argument, but *how* are virtues relevant to argument. In the light of these commonalities, perhaps one programme can help the other. This paper will explore whether analysis of the virtues of argument can lead to an improved understanding of the normativity of visual argument and whether application to visual argument can advance the development of virtue theories of argument.

Visual communication has been studied for many years in diverse disciplines, including aesthetics, art history, design, and semiotics, but focused attention on visual arguments is a comparative novelty. A recent survey describes 1996 as the 'seminal year', noting that 'more papers on visual argumentation were published that year than in all previous years combined' (Kjeldsen, 2015, 116). While much early debate was concerned with the possibility of visual arguments, and in particular whether meaningful arguments could be constructed without any verbal components, discussion has since moved onto a wider range of questions. This development has been facilitated by a terminological shift from 'visual' to 'multimodal' argument, the visual and the verbal being two of many modalities that arguments may exhibit (along with 'sounds, tastes, music, smells, tactile sensations and other non-verbal phenomena', Groarke, 2015, 134). In what follows, I shall refer primarily to visual arguments, since I am not concerned directly with modalities other than the visual or the verbal. However, 'visual argument' should be understood to include multimodal visual arguments: arguments that combine the visual with other modalities. Another substantial debate in the history of visual argumentation concerns whether visual arguments are propositional (Kjeldsen, 2015, 119). On the one hand, insisting that visuals are propositional seems not to do justice to their uniquely visual features; on the other hand, admitting non-propositional visuals into arguments suggests that visual arguments cannot be evaluated in a manner designed only to deal with propositions. Here virtue theories of argument would seem to have an obvious advantage, in so far as they evaluate arguments primarily in terms of their arguers' virtues, and thereby do not assign a fundamental normative role to propositions.

It is possible to identify ancient antecedents of virtue theories of argument (VTA), but their modern incarnation is most directly inspired by recent work

in virtue epistemology. As that field has matured, its proponents have drawn distinctions amongst the various means by which it has been advocated, some of which may usefully be transposed to VTA. Since the resulting flavours of VTA intersect with visual argument in different ways, it is worth taking a little time to survey this territory. One axis of distinction concerns the nature of the virtues and vices which are considered relevant to epistemology. For reliabilists, virtues are non-motivational dispositions or processes that are likely to result in the formation of true beliefs, such as sharp senses or a good memory (Sosa, 1985; Greco, 1993). Responsibilists' virtues are of a more familiar, Aristotelian nature: dispositions that motivate an agent to act in ways likely to produce more true beliefs, such as open-mindedness or perseverance (Montmarquet, 1992; Zagzebski, 1996). Mixed virtue approaches admit virtues of both types (Battaly, 2008; Lepock, 2011). Another axis separates the projects in which epistemologists are invested: some virtue epistemologists use virtues to tackle old problems, such as the definition of knowledge; others see virtues as opening up neglected areas, such as the value of knowledge; and others pursue both projects.

How do these distinctions apply to VTA? Elsewhere I have defined the virtues of argument as 'propagat[ing] truth'; by contrast with 'virtuous knowers [who] are disposed to act in a way that leads to the acquisition of true beliefs, virtuous arguers are disposed to spread true beliefs around' (Aberdein, 2010, 173). Katharina Stevens expands upon this definition, making the virtuous arguer 'the arguer who is disposed (and regularly acts on this disposition) to engage in argumentation in such a way that his contribution will, overall, further the improvement of the belief-systems of those that participate in the argumentation or get influenced by it in some other way' (Stevens, 2016, 377). So the virtues of argument would be precisely those dispositions that brought about these ends. However, these virtues (and their corresponding vices) need not be argumentation-specific. Many of the vices and virtues that have been discussed in VTA are also familiar from virtue epistemology or virtue ethics (see Aberdein, 2010, 2016, respectively, for lists of argumentational virtues and vices). Nonetheless, their application to arguers might induce a difference, at least of emphasis (Cohen, 2009, 57): just as epistemic courage is not necessarily identical to physical courage, argumentational courage

need not be identical to either. As in virtue epistemology, both motivational and non-motivational dispositions can be seen as virtues of argument. Hence a mixed virtues approach is well suited to VTA, although the interpersonal nature of argumentation lends ethical virtues a greater relevance in VTA than in virtue epistemology, perhaps tilting the mixture in a more responsibilist direction (Godden, 2016, 350). The project distinction also applies to VTA, although the projects of argumentation theory are not those of epistemology. Nonetheless, we can still usefully distinguish classical projects from less familiar ones. Chief amongst the former is the evaluation of arguments as artefacts: what makes an argument cogent? Projects of the latter sort address a range of questions often neglected in (non-virtue theoretic) argumentation theory, including what sort of roles can be played by arguers and how to maximize the value of arguing as an activity. We shall call these two approaches Classical VTA and Activity VTA, respectively and their simultaneous Combined VTA.

Fabio Paglieri has proposed a particularly helpful analysis of the varieties of VTA. He distinguishes moderates, for whom 'cogency is necessary but insufficient for argument quality' from radicals, for whom 'cogency is neither sufficient nor necessary for argument quality' (Paglieri, 2015, 74). Moderates are further subdivided: modest moderates hold that cogency 'is an aspect of quality that does not require considerations of character to be established' whereas for ambitious moderates cogency is 'determined by virtue theoretical considerations, like any other facet of quality' (Paglieri, 2015, 77). Paglieri suggests that Daniel Cohen is a proponent of radical VTA but that I am an ambitious moderate (Paglieri, 2015, 75; 77). (I am happy to embrace this characterization, but this paper addresses VTA in general, not ambitious moderate VTA exclusively.) We may now observe that modest moderates are proponents of a strict Activity VTA, since they disown the classical project of analysing cogency, whereas proponents of Classical or Combined VTA may be either ambitious moderates or radicals, depending on whether they maintain that VTA should be conservative of prior conceptions of argument evaluation, such as the RSA (relevance, acceptability, sufficiency) account of cogency (Johnson and Blair, 2006, 55).

In Section 2 I discuss the interplay between the normative foundation of visual argumentation and a virtue approach to the norms of argumentation, and seek to clarify the presuppositions of both. I argue that adoption of a virtue approach provides a defence for the claim that the same normative foundation underpins visual and non-visual argumentation alike. The remainder of the paper provides support for the premisses of this argument. Section 3 discusses the identity of the participants in arguments, and shows that visual arguments do not involve different sorts of participant from verbal arguments. Section 4 provides an overview of the vices and virtues of argument, with particular emphasis on those that may be relevant to visual argumentation. Section 5 surveys a range of different visual arguments and argues that they may be successfully evaluated within a virtue framework, without invoking any novel virtues.

2. Two Normative Independence Theses

David Godden has argued that 'the normative significance of visual arguments ... is the most important theoretical issue arising from the debate over the[ir] existence' (Godden, 2017, 2). I concur. As Godden observes, if visual argumentation is normatively revisionary, it represents a pressing challenge for existing theories of the norms of argument. I will argue below that VTA is well-placed to meet this challenge.

Godden proposes the following thesis as characteristic of a revisionary position:

> Normative Independence of the Visual (IndVis) There are distinctive criteria for the evaluation of visual argument which are independent of, and not reducible to, evaluative criteria for non-visual argument (Ralph Johnson, quoted in Godden, 2017, 11).

IndVis has a counterpart in VTA:

> Normative Independence of the Virtuistic (IndVir) There are distinctive criteria for the virtuistic evaluation of argument which are independent of, and not reducible to, non-virtuistic evaluative criteria for argument.

Both theses may be seen as cutting across their respective programmes. Thus there are supporters of visual argument who endorse IndVis and others who oppose

it.[1] Similarly, IndVir is upheld by many advocates of VTA, but rejected by others: radicals and ambitious moderates would seem committed to IndVir, but even modest moderates could endorse it, if they hold that the non-cogency aspects of argument evaluation are irreducibly virtuistic. However, modest moderates could also reject IndVir, if they did not assign an evaluative role to virtues or if they saw any such role as reducible to non-virtuistic terms.[2]

Combining the two theses IndVis and IndVir yields four possible stances with respect to the virtuistic evaluation of visual arguments:

(0) ¬IndVis & ¬IndVir: Virtues add nothing new, but non-virtuistic evaluative criteria are sufficient for both verbal and visual argumentation.

(1) IndVis & ¬IndVir: Virtues add nothing new, and non-virtuistic evaluative criteria that suffice for verbal argumentation are insufficient for visual argumentation.

(2) ¬IndVis & IndVir: Virtues add something new: evaluative criteria sufficient for both verbal and visual argumentation.

(3) IndVis & IndVir: Virtues add something new, but evaluative criteria sufficient for verbal argumentation are still insufficient for visual argumentation

Position (0), the null position, is presumably where the strongest opposition to both programmes is to be found (although opponents will not have it to themselves, since cautious advocates of both programmes could also endorse this position). Conversely, IndVis and IndVir may be seen as a full-throated endorsement of

[1]Godden tracks down examples of each, although he finds it much easier to identify normative non-revisionists (who reject IndVis) than normative revisionists (who accept IndVis) (Godden, 2017, §3). He notes that Leo Groarke and J. Anthony Blair have each asserted the continuity of evaluative methods for visual and verbal arguments, making them non-revisionists (Blair, 1996; Groarke, 1996). In general, it seems that IndVis is more frequently attributed to others than it is personally embraced. Johnson, who seems first to have formulated IndVis, did so to reconstruct a view he did not himself endorse (Godden, 2017, 10). Blair reads Groarke's early non-revisionism as a tactical gambit intended to head off the charge that visual arguments are not arguments, and suggests that Groarke might now accept IndVis (Blair, 2015, 219). Godden also proposes Michael Gilbert as someone to whom IndVis might be congenial, even if he has never explicitly endorsed it. However, this may turn on Gilbert's use of 'multimodal' which, as Blair observes, is quite different from the use the term has in the context of visual argument (Blair, 2015, 218). Elsewhere, Amy Anderson observes an implicit revisionism amongst advocates of 'multiliteracies', such as Gunther Kress, who regard texts and images as requiring different sorts of literacy (Anderson, 2015, 110). Although such projects may be primarily descriptive rather than normative, any evaluation based therein would seem committed to IndVis.

[2]The programmes defended by Tracy Bowell and Justine Kingsbury or Benjamin Hamby, in which virtues are confined to a higher-order, regulatory role, appear to be examples of the former alternative (Bowell and Kingsbury, 2013; Hamby, 2015).

the intuitions driving their respective programmes, even though neither thesis is strictly essential to the advocacy of either programme. Hence the success of the visual and virtue programmes might suggest that position (3) should now be the default option. But that would presume that the two programmes should be treated as independent. Might not IndVir provide the resources necessary to motivate rejection of IndVis, while accepting the transformative potential of visual reasoning? To answer this question, we need to explore how IndVis might be rejected.

David Godden defends the rejection of IndVis as follows:

P1 Arguments (whatever else they are or do, and however they are presented) necessarily involve (contain, express, convey) reasons.

P2 Assessing the rational quality of arguments involves assessing the probative qualities of their reasons.

P3 The probative qualities of reasons do not vary according to their manner of presentation or mode of expression.

C Hence, visual arguments do not require any revision to our normative theories of argument (Godden, 2014, 6 f.).[3]

An initial observation on Godden's argument is that P2 is ambiguous: does 'assessing the rational quality of arguments' *only* involve 'assessing the probative qualities of their reasons' or does it also involve assessing other things?[4] If it involves anything else, Godden's argument fails, for any other components might 'vary according to their manner of presentation or mode of expression' consistent with P3, since the other components are not probative qualities of reasons, thereby providing grounds to reject C. So let us assume that P2 should be read as

P2′ Assessing the rational quality of arguments only involves assessing the probative qualities of their reasons.

The boldest of Godden's premisses is P3.[5] However, P3 is stronger than is actually required to support C: Godden doesn't need to show that the evaluation

[3]A similar argument is distributed over several pages in (Godden, 2017). I quote the earlier, more compact version here for convenience. I note the (minor) revisions to wording below.

[4]In Godden's later article, P2 appears in slightly different form as '*Rational appraisal of argument*: The evaluation of argument involves assessing the probative or rational support claims are provided with by reasons' (Godden, 2017, 7). However, this version still exhibits the same ambiguity.

[5]For a critique, see (Dove, 2014, 2 f.).

of arguments is invariant with respect to their manner of presentation or mode of expression, merely that the variation is within a range that his evaluative theory requires for the evaluation of non-visual arguments.[6] So a revision of P3 may make Godden's argument more plausible:

P3′ The probative qualities of reasons vary within the same range independently of their manner of presentation or mode of expression.

To avail himself of this remedy, Godden would need to say much more about what constitutes the probative qualities of reasons, and specifically demonstrate that visual arguments do not bring any new probative qualities to the table. Here virtue theories have a head start, since they have had a lot to say about probative qualities in terms of the virtues and vices of arguers.

This suggests a more comprehensive revision of Godden's argument in virtuistic terms, as an argument for position (2):

PV1 Arguments (whatever else they are or do, and however they are presented) necessarily involve (contain, are expressed by, are conveyed by) arguers.

PV2 Assessing the rational quality of arguments only involves assessing the virtuistic qualities of the arguers.

PV3 The virtuistic qualities of the arguers vary within the same range independently of the manner of presentation or mode of expression of their arguments.

C Hence, visual arguments do not require any revision to our normative theories of argument.

How plausible are these premisses?

PV1 asserts the Agential Nature of Argument. It makes no reference to virtues and would be accepted as uncontroversial by many who are wholly unpersuaded by a virtue theory of argument. However, it may be challenged from another quarter: it depends on an understanding of 'argument' as token, not type. Some people have argued that arguments should be understood primarily as abstract objects, and thereby as types (Simard Smith and Moldovan, 2011; Goddu,

[6]Godden revises P3 somewhat more extensively than the other premisses; it appears in his later article as '*Trans-modal evaluative equivalence (EE)*: The same content-defined argument, no matter how it is presented, should receive the same rational or probative evaluation, *ceteris paribus*' (Godden, 2017, 13). He also acknowledges that EE is stronger than needed, observing that its contradictory is consistent with normative non-revisionism (Godden, 2017, 14).

2015). Rather than engage their arguments here, I suggest that anyone troubled by such considerations read 'argument' as 'argument instance' throughout this article.

PV2 is much stronger. Indeed it is stronger than IndVir. Specifically, it is equivalent to the following thesis:

> Normative Dependence on the Virtuistic (DepVir) All distinctive criteria for the evaluation of argument are dependent on, or reducible to, virtuistic evaluative criteria for argument.

By no means all the proponents of VTA accept DepVir. It corresponds to the distinction Paglieri draws between ambitious and modest moderates: radicals and ambitious moderates would accept DepVir; modest moderates would reject it. (Radicals wish to replace the concept of cogency with purely virtuistic argument appraisal and ambitious moderates to recapture cogency in virtuistic terms; DepVir would seem to be a presupposition for either project. But modest moderates subscribe to a non-virtuistic understanding of cogency, which must be inconsistent with DepVir.) So we may describe virtue theories of argument that subscribe to DepVir as 'immodest'.[7] Hence PV2 will be accepted by supporters of immodest VTA. For immodest virtue theorists, a visual argument which could not be satisfactorily evaluated virtuistically would be inconsistent with DepVir, and thus a counterexample to PV2.

Although a defence of DepVir in general is beyond the scope of this paper, I will concentrate on the immodest case where it holds. This is, in a sense, the simpler case, since it makes all aspects of argument evaluation virtuistic. On a modest VTA, however, argument evaluation must have two components: (i) a non-virtuistic account of cogency and (ii) a virtuistic account of evaluative aspects of arguments other than cogency. Presumably component (ii) would closely resemble the account of these aspects offered by immodest virtue theorists. So if an argument for ¬IndVis goes through for immodest VTA, it should also go through for component (ii) of a modest VTA. Of course, to defend ¬IndVis on a modest VTA we would also need a justification for ¬IndVis with respect to component (i). I shall not address that here but, if immodest virtue theorists have

[7]Hence my revision of Godden's argument is unlikely to be acceptable to Godden himself, since he explicitly rejects immodest virtue argumentation theory (Godden, 2016, 355).

an argument for ¬IndVis, then modest virtue theorists can at least narrow down any reasons for accepting IndVis to the non-virtuistic components of their account of argument evaluation.

The remaining premiss is PV3, which asserts the following thesis:

> Trans-Modality of Virtue (TMV) No virtues and vices are exhibited by arguers engaged in visual argument that are not exhibited in verbal argument.[8]

In other words, a uniquely visual virtue or vice would be a counterexample to TMV. (There may well be virtues and vices that take on much greater—or less—significance in a visual context, but if they play any role in verbal argument, they are consistent with TMV.)

To settle if there are such counterexamples to DepVir (PV2) or TMV (PV3), and thereby if the above argument for normative non-revisionism is sound, we must determine who the participants in visual argument are, what their virtues and vices comprise, and whether those virtues and vices are sufficient to evaluate their arguments. I address these questions in turn in the next three sections.

3. Participants in Visual Argument

Before we can identify the participants in visual argument, we must identify the participants in argument in general. While it is widely accepted that the proponent of an argument is an arguer and so is the respondent, or coarguer, virtue theories of argument characteristically draw the net wider. Cohen has proposed that 'we need to expand the category of "arguer" to include everyone who is relevant for the judgment that an argument is, or is not, fully satisfying' (Cohen, 2013, 480). That includes 'judges, juries, and interested spectators. In some contexts, it would make sense to extend the list even further so as to include any party with an interest in the outcome' (Cohen, 2013, 481). On this maximal interpretation, the subjects of the argument, indeed, any individuals discussed, referred to, or depicted within the argument would count as arguers. However, we may acknowledge the importance of these people without granting them arguer status.

[8]This statement of TMV is restricted to two modes, the verbal and the visual. An unrestricted version of TMV seems plausible, but I shall not attempt to defend it here.

Crucially, having an interest in the outcome of an argument does not grant you any agency with respect to the determination of that argument. (Notoriously so: this may be a legitimate grievance of such excluded parties.) Rather, since many virtues of argument are 'other-directed' (Aberdein, 2010, 176), that is they are exercised in relation to some other person, these interested parties are amongst the others towards whom the virtuous (or vicious) behaviour of arguers is directed. In sum, we may enumerate five categories of interested parties:

(1) Arguer (proponent);
(2) Coarguer (respondent);
(3) Adjudicator (umpire, judge, evaluator);
(4) Audience (reporters, hecklers, kibitzers, trolls);
(5) Other interested parties.

They are listed in order of agency within the argument. Members of the last category, interested parties who have no other role, even as audience members, do not count as arguers. However, we should be aware that roles can change over the course of an argument.

In many cases, identification of roles may be quite difficult. Who is responsible for the argument in an advertisement (such as that discussed in Section 5.1 below)—the client, the advertising agency, or the designer(s)? Are the subjects of a documentary or its director the arguers behind its arguments? Arguments transmitted over mass communication media inevitably have more heterogenous audiences than more narrowly targeted arguments. None of these issues seems to be unique to visual argumentation, but all may arise more frequently in visual contexts. Categories (1)–(4) are roles common to argument in any medium, so it is hard to see how they could include varieties of people in visual cases who were unknown in non-visual cases. One possibility might be division of labour: since visual arguments seem less likely to have a sole author, perhaps they assign roles with no counterpart in verbal argumentation. Comic books routinely separate the tasks of writer and artist; film and television are the product of much larger collectives, including some primarily or exclusively visual trades, such as art directors, designers, lighting crew, and camera operators. Nonetheless, the additional personnel would seem to either share the arguer role or, if they are

not in a position to take ownership of the visual argument, qualify only as other interested parties.

Indeed, category (5) may well include some additional people in visual arguments. For example, advocacy groups representing an ethnic minority may object to what they perceive as a racial slur in a political cartoon (see Section 5.5). Or the original model for a piece of photographic stock art may be surprised to find it employed within an argument defending a controversial standpoint—even more so if it wasn't stock art, but an illicitly appropriated image. Yet, as discussed above, none of these individuals are arguers in the sense of being party to the original argument. Their existence suggests that visual arguers may have to take a wider population into consideration in the exercise of their virtues, but not necessarily that they will need to exercise different virtues. I will consider which virtues count as virtues of visual argument in the next section.

4. Virtues of Visual Argument

Might there be uniquely visual virtues and vices? To answer this question, we must return to the definition of virtue. As discussed in Section 1, a central division in virtue epistemology is that between proponents of reliabilist and responsibilist virtues. Reliabilist epistemic virtues are permanent dispositions which reliably tend to the acquisition of knowledge. These include the faculties of sight and hearing, introspection, memory, and a facility with deduction and induction (Battaly, 2008, 644). One immediate question concerns the reliabilist virtue of sight (Sosa, 1985, 228). If ever there was a candidate for a uniquely visual virtue, surely this is it. Granted, verbal arguments are often presented in written form, which cannot be read without a reliable visual faculty, but that is a contingent aspect of their presentation—they could be spoken out loud, or indeed printed in braille, without loss of content, and thereby made wholly explicit to a sightless agent. The translation of visual arguments into a form accessible without the faculty of sight seems more challenging. Images can be described in words and extensive protocols exist for the composition of diagrams in braille. Nonetheless, to assume that these processes are lossless would beg the question against anyone arguing that there are uniquely visual features of arguments which require their own evaluative norms.

One possibility would be to accept sight as an argumentational virtue and reject the trans-modality of virtue, TMV. If sight is indeed an argumentational virtue, then TMV is incompatible with VTA. It might still be possible to reject IndVis on other grounds, but the elevation of sight from an inessential to an essential aspect of evaluation seems clearly revisionary. Hence a reliabilist or mixed VTA that admitted sight as a virtue would appear to be committed to position (3), as discussed in Section 2 above. Nonetheless, IndVis may be made more palatable by a VTA perspective, since the revisions to the norms of argument would arise within a broader framework that remains unchanged. Hence this account of position (3) would seem secure against the charge which faces most supporters of IndVis: that revising the norms of argumentation disqualifies any 'arguments' for which such revisions are necessary.

However, although the virtues of argument are often modelled on those defended by virtue epistemologists, and many virtues do double duty as both argumentational and epistemic, they need not be identical. So the virtue of sight is not necessarily an argumentational virtue. Indeed, virtue argumentation theorists seem mostly to focus on responsibilist virtues. For example, the virtues identified by Daniel Cohen are willingness to engage in argumentation, willingness to listen to others, willingness to modify one's own position, and willingness to question the obvious (Cohen, 2005, 64). My own 'tentative typology' of argumentational virtue, contains many other virtues, but they are all represented as subdividing the four virtues discussed by Cohen (Aberdein, 2010, 175). This responsibilist inclination should not be surprising. The reason which virtue responsibilists offer for disqualifying the senses as virtues is the voluntariness of belief; as Linda Zagzebski argues, since sensory beliefs are 'formed in an unconscious manner without the agency of the agent ... it is peculiar to think of them as paradigms of rationality or justifiability' (Zagzebski, 1996, 278). This argument holds a fortiori for argumentation, since unconscious good argument would be even more peculiar than unconscious knowledge.

If the faculty of vision is not a virtue, then what is it? Elsewhere, I propose that a virtue theory of argument should accommodate skills as well as virtues:

'no argument can be unskilled but virtuous, because the potential for misunderstanding which results even from unintentional errors of skill is inconsistent with virtue. It is plausible that some skills are essential for the exercise of certain virtues' (Aberdein, 2010, 177). It may seem incongruous to categorize being able to see clearly as a skill, perhaps because it is not an *acquired* capacity. However, there are acquired capacities of visual perception that seem skillful, such as being able to make unusually fine distinctions of colour, recognize a great diversity of plants or animals at sight, or pick up on visual cues to the emotional state of another person. It seems reasonable to treat vision in general in the same way as these special cases, whether we refer to it as a skill or not. So, on this broadly responsibilist account of argumentational virtue, sight in itself is not a virtue; there may be virtues which depend essentially upon it, but as yet we have no direct evidence for them. For example, while being empathetic may be a virtue, and noticing the emotional states of others from visual cues is a skill which would afford one opportunities in which to exercise that virtue, the virtue of empathy still does not depend essentially on this skill, since one might become aware of the emotional states of others independently of visual perception. In the next section I will see whether consideration of a variety of different visual arguments turns up any virtues that are uniquely visual or depend essentially on visual skills.

5. Variously Vicious and Virtuous Visuals

In this section I address a twofold task. Firstly, to search for instances of evaluation in accounts of visual arguments and determine whether such evaluation can be accommodated in terms of virtues. A visual argument which resisted such evaluation would be a counterexample to DepVir. (As a subordinate task, we may ask if any visual arguments answer the following incisive question, attributed to Jean Goodwin: 'Are there accusations of argumentative vice in actual argumentative practice?' (quoted in Godden, 2016, 354). An affirmative answer would demonstrate the applicability of VTA to a real world aspect of argumentative practice that has been otherwise neglected.) Secondly, to search for cases—if any—where exclusively visual virtues (or virtues depending essentially on visual skills) are required. Here an affirmative answer would indicate the failure of TMV, suggesting that applications of VTA to visual argument would

need to accept IndVis. However, a negative answer (insofar as a negative answer can be derived from an inevitably brief survey) would lend support to TMV, and thereby to the feasibility of position (2).

I will approach these tasks through an inventory of visual arguments developed by David Birdsell and Leo Groarke. They 'distinguish five ways in which visual images are used [in arguments]: as flags, demonstrations, metaphors, symbols, and archetypes' (Birdsell and Groarke, 2007, 104). This account is not beyond criticism. The five ways are notably heterogenous, since metaphors and symbols are means by which visuals may convey meaning, whereas flags, demonstrations, and archetypes are distinct functions that visuals may exhibit.[9] Moreover, there are other distinctions amongst types of visual which this inventory does not address, notably that between diagrams and pictures, which I shall return to below in Section 5.2. Nonetheless, Birdsell and Groarke's five ways of using visuals in argumentation are a widely discussed and fruitful starting point. I will explore each of the five to see if its use or, perhaps more illuminatingly, misuse requires us either to abandon a virtue account of argument evaluation or to invoke virtues or vices that would play no role in the evaluation of verbal argumentation.

5.1. **Flags.** 'An image functions as a *visual flag* when it is used to attract attention to a message conveyed to some audience' (Birdsell and Groarke, 2007, 104). As Birdsell and Groarke suggest, flags 'solve a fundamental problem in argumentative discourse': how to attract attention to one's argument (Birdsell and Groarke, 2007, 104). While Birdsell and Groarke are correct that visuals can be effective ways of drawing attention to an argument, there also seem to be lots of ways of attracting attention verbally or textually, such as 'screamer' headlines or, for that matter, actual screaming, or a wide range of rhetorical techniques. Indeed, flagging would seem to correspond to amplification, one of the key aims of traditional (verbal) rhetoric.

Broadly speaking there seem to be two ways flagging could go wrong: a flag could fail to attract attention, or it could attract the wrong sort of attention. That is, it might distract from the arguer's conclusion, or conflict with it, or generate unnecessary confusion. For example, Fig. 1 shows an orange-coloured liquid being

[9] I am grateful to an anonymous referee for this journal for stressing this point.

FIGURE 1. The Lead-Free Kids campaign, a joint effort of the Ad Council, the Environmental Protection Agency, the U.S. Department of Housing and Urban Development, and the Coalition to End Childhood Lead Poisoning.

poured from an old paint tin into a sippee cup, alongside the caption 'If your home was built before 1978' and a button marked 'click here'. The visual ambiguity of orange juice/orange paint is certainly attention-grabbing. Combining caption and image yields the alarming conditional 'If your home was built before 1978, you're feeding paint to your child!' However, the Coalition to End Childhood Lead Poisoning, who sponsored this advertisement, are concerned with the dangers of old, dry paint chips, not liquid paint (which is unfit to drink whether or not it contains lead). So, at least read uncharitably, the attention that this image attracts may be at the expense of confusing the campaign's overall message. The problem here, if problem there be, is that the audience has been distracted from the conclusion that the argument was intended to support. But this vice (or failure of skill) is just as much of a risk in verbal contexts.

5.2. **Demonstrations.** 'An image is a *visual demonstration* when it is used to convey information which can best be presented visually' (Birdsell and Groarke, 2007, 105). The statistician Edward Tufte has written extensively on visual presentation of information. He states that 'there are right ways and wrong ways to show data; there are displays that reveal the truth and displays that do not' (Tufte, 1997, 45). One critical response to Tufte expands on this point: 'It is not just that

representation mirrors reasoning, good or bad, but that poor representation can itself mislead us. Even if we reasoned well, we could represent our reasoning so poorly that the argument loses its power to persuade or, worse, misleads us into making errors in reasoning we would not otherwise have made' (Robison et al., 2002, 65). Not every study of visual demonstration concurs. For example, one analysis of causal arguments concludes that 'Normatively speaking, the argumentative strength of a visualization mainly depends on the quality of the underlying data and theories and not the visual format' (Oestermeier and Hesse, 2000, 101). But if Tufte is right, then visual demonstration could be an important source of uniquely visual argumentational virtues and vices. His position is best discussed through one of his best known examples.

The Space Shuttle Challenger exploded shortly after launch on 28 January 1986, killing all seven crew members. The explosion began with a malfunctioning seal, or 'o-ring', in one of its booster rockets. It was known to the engineers at Morton Thiokol, the company that designed and assembled the booster rockets, that the o-rings were unsafe at low temperatures, and that the weather forecast for the launch day was well below the temperature at which any previous launch or test of the rockets had been attempted. The engineers prepared a sequence of charts intended to persuade first their managers and then NASA that the launch should be stopped. However, senior NASA officials were unconvinced, and Morton Thiokol's managers eventually overruled their engineers, permitting the launch to proceed.

Tufte has analysed this incident as a failure of visual demonstration by the Morton Thiokol engineers: 'a scandalous discrepancy between the intellectual tasks at hand and the images created to serve those tasks. As analytical graphics, the displays failed to reveal a risk that was in fact present. As presentation graphics, the displays failed to persuade government officials that a cold-weather launch might be dangerous' (Tufte, 1997, 45). Tufte's censure of the engineers may well be misplaced: he has been criticized for misunderstanding the precise argument that the engineers were trying to make and misrepresenting the amount of data actually available to them (Robison et al., 2002, 78). However, Tufte also demonstrates that similar failings are present in the charts prepared as part of

Morton Thiokol's testimony to the presidential commission into the Challenger disaster.

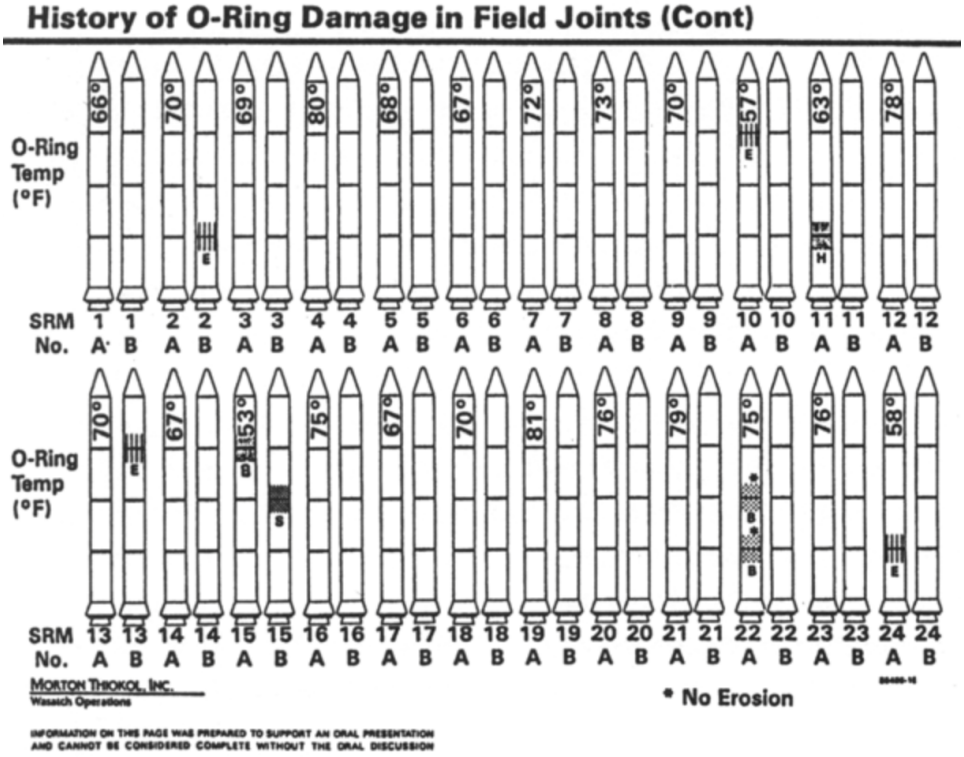

FIGURE 2. History of O-Ring Damage in Field Joints (Cont), Morton Thiokol, Inc.

Specifically, Tufte indicts Fig. 2 of several failings. This slide, the second of two entitled 'History of O-Ring Damage in Field Joints', depicts the known flaws in the o-rings of booster rockets used in earlier launches. However, it depends on a legend only shown on the previous slide to distinguish the different types of damage: Tufte labels this 'The Disappearing Legend' (Tufte, 1997, 47). The schematic rockets take up a disproportionate amount of space. Tufte calls them 'Chartjunk', since they do not contribute to understanding *why* the rockets failed or didn't (Tufte, 1997, 48). Any correlation between temperature and o-ring damage is obscured by the comparative difficulty of reading the temperatures and interpreting the damage, a 'Lack of Clarity in Depicting Cause and Effect' (op. cit.). Critically, by displaying the rockets in chronological rather than temperature

order, an opportunity is missed to display the data in a manner most relevant to the question at hand: was there a correlation between temperature and o-ring damage? The slide exhibits what Tufte calls 'Wrong Order' (op. cit.).

Are the failings that Tufte identifies vices? If they were vices, then they would seem to be uniquely visual vices, since they turn critically on aspects of the visual representation of data. However, precisely because they are properties of visual representations, and not of the characters of the arguers employing such representations, they should rather be seen as akin to fallacies: not intellectual vices in themselves, but the products of such vices (or of failures of skill) (Aberdein, 2016, 413). More specifically, each of these failings of visual representation might be attributed to the vices of haste or carelessness, but they might also indicate a deeper failure to think through which information is relevant to the argument and how it may best be presented, resulting from the absence of such virtues as sensitivity to detail and intellectual integrity (Aberdein, 2010, 175). Crucially, whichever specific virtues are at issue, there are no grounds to suppose that they are uniquely visual.

Fig. 2 is a good example of a visual demonstration, but there is an important respect in which it is unrepresentative: it is a diagram. Diagrams are only one sort of 'information which can best be presented visually' (Birdsell and Groarke, 2007, 105). Notably, they convey comparatively little information, or more precisely, they focus attention on comparatively little of the information they convey. By contrast, pictures convey (or direct our attention towards) far more information. There are several, overlapping ways of characterizing this distinction.[10] One possibility would be to focus purely on the quantity of information conveyed, the bandwidth, as it were, or perhaps the density of information, the quantity in a given area. Another would be to emphasize structural features: thus Nelson Goodman distinguishes 'replete' from 'attenuated' representations in terms of how (un)restricted their constitutive aspects are (Goodman, 1976, 230). Diagrams are attenuated because they have many constitutive aspects (perhaps the thickness of the lines, or their colour) which are irrelevant to the diagram's success. Conversely pictures

[10]The distinction has been discussed extensively in aesthetics (see, for example, Kulvicki, 2006). It has attracted much less attention in visual argumentation, perhaps surprisingly. Indeed, in the context of multimodal argumentation, one could make a case that diagrams and pictures should be understood as distinct modes.

are replete since all such aspects are presumed to be relevant. Jens Kjeldsen invokes a similar distinction when he maintains that pictures are capable of 'thick representation that, in an instant, can provide a full sense of an actual situation and an embedded narrative connected to certain lines of reasoning' (Kjeldsen, 2016, 267). Such thick representation would seem to depend upon at least density and perhaps repleteness; certainly Kjeldsen's examples are photographic images, often highly emotionally charged ones, not diagrams. Indeed pictorial demonstration can be invaluable in argumentation that depends upon eliciting an emotional response from the audience, as the study of war posters discussed in Section 5.4 below concludes, 'Anyone whose job it is to select war posters can be sure of getting only the most effective posters by asking two simple questions: 1. Does the poster appeal to the emotions? 2. Is the poster a literal picture in photographic detail?' (Young & Rubicam, Inc., 1942, 16). On a VTA account, both the emotional response and the argumentation that elicited it may be evaluated as virtuous or vicious depending on context (Aberdein, 2016, 416 ff.). That the eliciting was visually mediated does not seem to make a difference to such an evaluation.

Not all pictorial demonstration is concerned with the emotions. Consider the following passage from an extended argument attributing a portrait to Leonardo da Vinci:

> [T]he parallel hachures [shading lines] done with the left hand are the "signature" of Leonardo's drawings. You can compare the hachures of the right-handed Boltraffio (fig. 9), which start at the left bottom and go up to the top right, with those of the left-handed Leonardo (fig. 1), which go from the bottom right up to the top left (or vice versa). The entire face of *La Bella Principessa* is modeled by hachures of this type, but in this detail (fig. 10a) we can see the hachures in pen and ink in the background more easily. They are similar to the ones in other drawings by the artist, such as the British Museum's *Study of a Man in Profile*, also dated from the years 1490 (fig. 10b) (Geddo, 2013, 16, figures omitted).[11]

[11]See also (Geddo, 2009, 67). This example is discussed by Douglas Walton, but as the basis for a subsequent appeal to expert opinion (Walton, 2013, 516 f.).

The audience is repeatedly directed to attend to features of a series of a pictures. The argument subsequently turns to 'typological and stylistic characteristics of the portrait, as well as the remarkable mastery of its author' (Geddo, 2013, 19). These are all factors which essentially involve the repleteness of images, that is consideration of all of their aspects. Such consideration may well frustrate reconstruction in propositional terms so, if such reconstruction were essential to the evaluation of the argument, this would lend support to IndVis. However, the virtues required of the arguer and the audience, such as attention to detail, all seem to be trans-modal dispositions.

5.3. **Metaphors.** 'Like a verbal metaphor, a *visual metaphor* conveys some claim figuratively, by portraying someone or something as some other thing' (Birdsell and Groarke, 2007, 105). In verbal reasoning, metaphors can go wrong in various ways. They can be 'mixed', in which an incompatible combination of vehicles fight to convey the same tenor. They can be insufficient. They can be overdone (catachresis). Since all of this terminology is derived from verbal argumentation, it is to be expected that the virtues of verbal argumentation are sufficient to characterize visual metaphors and their failure states. Nonetheless, it is worth looking at an example.

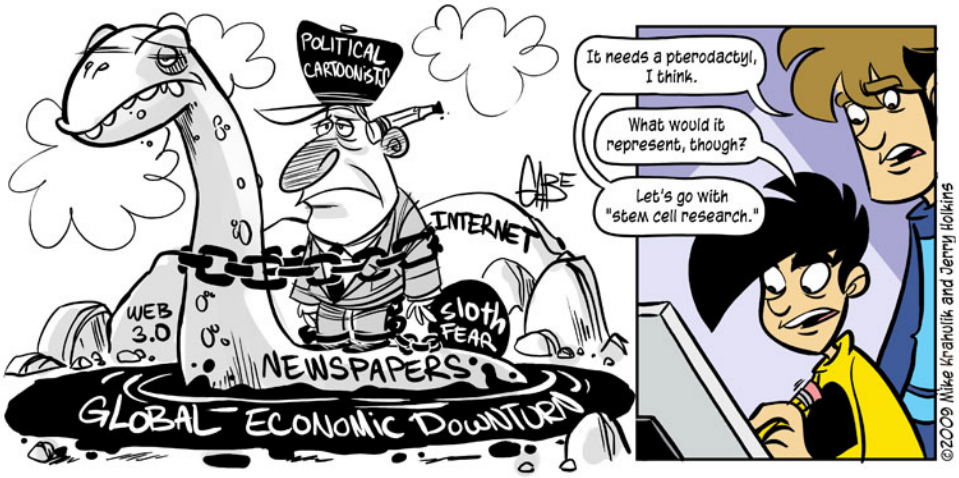

Figure 3. 'The Way Of All Flesh,' Mike Krahulik & Jerry Holkins, *Penny Arcade*, © 2009

Belaboured metaphor is a commonplace of the American political cartoon. This can rise to the level of visual catachresis. Fig. 3, taken from the popular web comic *Penny Arcade*, critiques this problem. The left-hand panel is drawn in the style of an American political cartoon. The black and white, borderless image depicts a conservatively dressed, middle-aged man, in a cap labelled 'Political Cartoonists', staring glumly out of frame as he and the equally glum dinosaur (labelled 'Newspapers') to which he is shackled by manacles labelled 'Sloth' and 'Fear', sink into a tar pit labelled 'Global Economic Downturn'. Behind him, but seemingly within easy reach, are sunlit uplands labelled 'Internet' and 'Web 3.0'. In the right-hand panel, drawn in the regular style of *Penny Arcade*, in colour with a strong black frame, the creators' comic self-depictions discuss the left-hand panel. 'It needs a pterodactyl, I think' says the writer. 'What would it represent, though?' asks the artist. 'Let's go with "stem cell research",' comes the reply. Mike Krahulik and Jerry Holkins, creators of *Penny Arcade*, cleverly send up the overblown stylistic repertoire of the American political cartoon, while using that repertoire to make their own political point: newspaper cartoonists should stop complaining about the weakness of the newspaper industry and make the move to the internet. However, for present purposes, the most striking feature of their critique may be that they explicitly link the weakness of the visual argumentation characteristic of newspaper cartoons to two of the cartoonists' vices—sloth and fear[fulness]—neither of which is uniquely visual.

It may seem that the content of Fig. 3 relevant to its evaluation as an argument may be captured in words easily enough, as in the description above. However, this overlooks its central effect: the perfect mimicry of the easily recognisable visual style of the American political cartoon. There are also subtler aspects that are harder to describe, such as the comedic doubling of the heavy-lidded expression of despair, common to both cartoonist and dinosaur. Hence this example also exhibits the pictorial richness discussed in Section 5.2. Thick representation may well work in consort with visual metaphors to enhance their persuasive efficacy. Krahulik's skill in achieving these effects may thus be seen as facilitating his argumentational virtue, for example by permitting a greater degree of intellectual empathy with his subject and with his audience. But, as we saw in the context of

visual demonstrations, pictorial richness alone is not a reason to accept IndVis. It is not obvious why it should provide any more reason in the context of visual metaphors.

5.4. **Symbols.** '*Visual symbols* have strong associations that allow them to stand for something they represent' (Birdsell and Groarke, 2007, 105). Birdsell and Groarke state that 'we are able to communicate effectively with images because we share (at least to some degree) a common vocabulary of symbols that can be used to make convenient references' (op. cit.). Facility with this common vocabulary, as an acquired disposition towards a type of understanding, somewhat resembles an intellectual virtue. However, it may be more properly seen as a skill, albeit one that could be crucial to the exercise of some virtues. Conversely, at least within a given culture, a failure to recognize the most familiar symbols could be seen as a lack of skill, and thereby perhaps a failure of any virtues that depend upon that skill, or that should motivate an individual to acquire it. Birdsell and Groarke are bullish about the efficacy of such symbols, which 'everyone passingly familiar with Western culture knows (in the absence of strong contextual information to the contrary)' (op. cit.). Nonetheless, failed interpretation, even of seemingly obvious symbols, is surprisingly easy to uncover.

Shortly after the United States entered World War II, the advertising agency Young & Rubicam were commissioned by the U.S. government to investigate the efficacy of Canadian wartime propaganda posters. Since Canada had already been at war for two years, the U.S. hoped to learn from their experience. Many Canadian posters made use of symbolism. Young & Rubicam's research suggests that this was a misstep: viewers were frequently baffled by such posters or arrived at interpretations wholly at odds with their authors' intentions. For example, in Fig. 4, under the legend 'To Victory', the British lion and the Canadian beaver march side by side, their weapons drawn, their faces fixed in grim resolution. Their symbolic status is strongly underlined: the lion has an Imperial Crown and a Churchillian cigar, the beaver a Mark I army helmet with maple leaf insignia and a sash inscribed 'Canada'. The lion's bandaged tail suggests that Britain is responding to enemy aggression, and the audience are invited to conclude that, with Canada's help, victory is assured. Nonetheless, 'nearly half' of this poster's

FIGURE 4. 'To Victory'. Issued by Director of Public Information under authority of Hon. J. T. Thorson, Minister of National War Services, Ottawa

Canadian audience failed to understand it, offering such bizarre misreadings as 'Does it mean all men are equal?', 'It represents the Russian bear and the Japs', or 'Germany and England, the ape and the bulldog, each out against the other' (Young & Rubicam, Inc., 1942, 12).

What went wrong with 'To Victory'? Both the audience and the arguer(s) seem to have been at fault. Firstly, Young & Rubicam's research uncovered some striking failures in the skill of understanding the 'common vocabulary of symbols'. At this distance we can only speculate about the cause of this failure. Perhaps the respondents were unfamiliar with the specific symbols used; perhaps they wilfully misinterpreted the image for politically motivated reasons (a couple of responses, 'This poster shows that Canada is leading England, and that we are going to do

most of the fighting' and 'Britain has courage and Canada does all the work' (op. cit.), suggest as much); perhaps they were visually impaired. These causes are different in kind: ignorance of culturally specific symbols is a lack of skill; wilful misinterpretation is an intellectual vice; poor sight is the absence of a skill-like capacity, as discussed in Section 4. Notably, the only one of the three in which virtue and vice are involved, at least as defined above, is not uniquely visual: texts can be misread just as wilfully. Whatever the reason for the poor reception of the poster, Young & Rubicam's research demonstrates that the skill of recognizing symbols cannot be relied upon as readily as Birdsell and Groarke suggest. Indeed, presuming that an audience will possess this skill (and exercise it as required) is also a vice for the arguer who uses symbols in this manner.[12] As Young & Rubicam assert, 'abstract design and symbolism are to be avoided, as they are likely to be misunderstood or not understood at all' (Young & Rubicam, Inc., 1942, 1). But vicious use of symbolism is not uniquely visual either, since similar issues arise in purely verbal contexts, where esoteric jargon or complex imagery may be equally baffling for audiences.

5.5. **Archetypes.** 'We include *visual archetypes* as a kind of visual symbol whose meaning derives from popular narratives' (Birdsell and Groarke, 2007, 105).[13] Of course, not every popular narrative is an attractive one. In some cases, such as racist stereotypes, a popular narrative may be so distasteful that alluding to it could be considered a vice. Even an accidental allusion may be blameworthy, perhaps especially in the visual case, as David Pilgrim, founder of the Jim Crow Museum of Racist Memorabilia, explains: 'A cartoonist or an artist . . . can do harm inadvertently by tapping into preexisting racial stereotypes' (quoted in Wallis, 2007, 215).

In conversation with an Israeli cartoonist, the British cartoonist Steve Bell describes two occasions on which his cartoons have been characterized as antisemitic. In one, a cartoon published during the 2005 United Kingdom general election campaign mocked the Conservative party's slogan 'Are You Thinking What We're Thinking?' and its then leader Michael Howard, depicting the latter as a vampire: 'I drew a cartoon of Howard at the podium, in a cape with a cheeky fanged grin

[12]Specifically, a failure of intellectual empathy (Aberdein, 2016, 415).
[13]For an analysis of narrative argument in virtue terms, see (Al Tamimi, 2016).

holding a small sherry glass of blood, saying "Are You Drinking What We're Drinking?" Cue more blood libel hysteria. I didn't know the guy was Jewish and anyway, that's not the point. Ignorance is no defence. I must confess that, at the time, I wasn't even sure what the blood libel was' (Bell and Valley, 2013, 33). Ironically, Bell, who considered the Conservative party slogan 'a classic piece of coded "dog whistle" politics' (op. cit.), was himself being attacked for dog whistle antisemitism. Indeed, the incident does resemble at least the first two steps of what Ian Haney López calls 'the rhetorical punch, parry, and kick of dog whistle racial jujitsu. Here are the basic moves: (1) punch racism into the conversation through references to culture, behavior, and class; (2) parry claims of race-baiting by insisting that absent a direct reference to biology or the use of a racial epithet, there can be no racism; (3) kick up the racial attack by calling any critics the *real* racists for mentioning race and thereby "playing the race card"' (López, 2013, 130). However, the blameworthiness implied by López's sequence relies essentially upon the insincerity of the arguer: the 'rhetorical punch' is 'coded', the 'core point of the code being to foster deniability' (op. cit.). If there was no code, no intent to convey a covert meaning, then the accusation would be baseless. Nonetheless, such accusations can be hard to counter: no arguer can provide independent evidence demonstrating the lack of such an intention. The best that can be done is to appeal to ethos, that is to virtues: as Bell concludes, 'we have to trust the *integrity* of the individual artist, journalist, writer, historian and human being' (Bell and Valley, 2013, 33, emphasis added).

Conversely, the exaggerated or misplaced fear of causing offence may also be a vice. This concern exemplifies the 'third-person effect', the tendency 'to overestimate the influence that mass communications have on the attitudes and behavior of others' (Davison, 1983, 3). The emotive impact of rich visuals (discussed in Section 5.2) and the heterogeneity of the mass media audience (noted in Section 3) may combine to exacerbate this effect. For example, the African-American cartoonist Keith Knight, observes that 'editors in supposedly liberal bastions such as San Francisco clamp down on his comics far more than editors in seemingly conservative cities' (quoted in Wallis, 2007, 40). He reports an exchange with the editor of 'a northern California alternative weekly' who rejected a cartoon in

which Knight depicted himself as a crack smoker, on the grounds that 'We don't want our readers to think that *we* think that all black people smoke crack. ... We have a large white liberal readership and we do not want to offend them' (op. cit.). The editor concedes that Knight is not saying that all black people smoke crack, but fears that her readers (the third person) may misread him, and by extension her, as believing this. Knight interprets this instance of the third person effect as 'cautious editors tend[ing] to disingenuously adopt the perceived sensitivities of their readers' (op. cit.). In so doing, he ascribes a vice, disingenuousness, to these editors in their role as audience for his visual arguments.

Integrity is an argumentational virtue, but not uniquely visual (Aberdein, 2010, 175). Likewise, insensitivity in allusion and disingenuousness in interpretation are both argumentational vices, but neither is uniquely visual.[14] As with the other types of visual argument, it appears that an inventory of virtues and vices sufficient for evaluation of archetypes in verbal argumentation will be sufficient for their evaluation in visual argumentation.

6. Conclusion

In Section 2, I presented an argument that virtue argumentation theory provides a basis for rejecting IndVis, the normative independence of visual argumentation. We are now in a position to assess the strength of the premisses of this argument. In Section 4, we saw that admitting the reliabilist virtue of sight as an argumentational virtue is incompatible with TMV, one of those premisses. While that is one possible way forward for a virtue account of visual argumentation, we saw that there are good reasons to prefer a responsibilist account of argumentational virtue, on which sight would be a skill, not a virtue. That still left open the possibility of there being other exclusively visual virtues (or virtues that depended essentially upon visual skills).

So, at the beginning of Section 5, I proposed two tasks to be addressed by consideration of case studies of visual argument. Firstly, can visual arguments be effectively evaluated within VTA? Secondly, does such evaluation require novel visual virtues? I addressed these tasks with an account of how each of the five

[14]These vices may be seen as subtypes of unwillingness to listen to others and undue willingness to modify one's own position, respectively (Aberdein, 2016, 416).

varieties of visual argumentation enumerated by Birdsell and Groarke may be evaluated. At no point did I uncover an aspect of these arguments which a virtue theory could not address or which required virtues beyond those necessary for the evaluation of verbal argumentation. We saw that visual flags could be misused. Such failures could be attributed to a variety of argumentational vices (or perhaps just a lack of skill), but none seem to be uniquely visual. I distinguished between diagrammatic and pictorial examples of visual demonstration. Tufte identifies a number of ways in which the former may go awry. Although these flaws do appear to be distinctively visual, they are not themselves vices but rather the consequence of vices of a more general type. Likewise, we saw that pictorial demonstration also relies for its success on virtues of its arguers, which vary with the subject matter of the argument, but not with its mode of expression. A variety of vices were also seen to be at work behind failed uses of visual metaphors and symbols, but none of them exclusively visual. Lastly, we saw that visual archetypes make special demands on the character of the arguer because of the risk of misuse. Indeed, a character appeal may be the only defence against such a charge. We also encountered some direct references to virtues and vices in actual argumentative practice, notably with archetypes but also with metaphors, thus answering Goodwin's question. A more extensive search may throw up such usage in a wider range of contexts.

A visual argument whose analysis necessitated uniquely visual virtues would have been a counterexample to TMV. A visual argument which defied virtuistic analysis would have been a counterexample to DepVir. The discovery of either would have decisively undermined my argument against IndVis. The failure to exhibit such counterexamples cannot be similarly decisive. Nonetheless, I believe that the account above provides at least a presumptive argument for the sufficiency of a virtue approach in accounting for visual argument.

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