Plural Action Sentences and Logical Form: Reply to Himmelreich

Kirk Ludwig

Australasian
Association of
Philosophy

Routledge
Taylor & Francis Group

Check for updates

Plural Action Sentences and Logical Form: Reply to Himmelreich

Kirk Ludwig

Indiana University, Bloomington

ABSTRACT
This paper replies to Himmelreich's 'The Paraphrase Argument Against Collective Actions' [2017], which presents three putative counterexamples to the multiple agents analysis of plural action sentences. The paper shows that the argument from the first example, the discursive dilemma, fails because it relies crucially on a simplification of the target analysis, and that the others don't bear on the question because they turn out on examination to be about individual rather than group action sentences.

1. Introduction

In 'The Paraphrase Argument Against Collective Actions', Johannes Himmelreich argues that the strategy of paraphrasing plural action sentences in terms of individual agency 'is untenable' [2017: 81]. He offers three counterexamples to what he sees as the central idea, working with a simplified version of the individualist account of the logical form of plural action sentences that I have developed elsewhere [2007]. Here I show that the first example, in which a procedure for aggregating judgments may result in a decision that none of the participants would endorse alone, fails to touch the original account, because the simplification that Himmelreich works with leaves out something crucial. Then I show that the second two examples, which rely on the idea that a group of agents or organisms may realize a functional organization sufficient for agency, are irrelevant.

2. The Logical Form of Plural Action Sentences

The target account of plural action sentences is the multiple agents account. On this view, what it is for *us* to do something is for *each* of us (and no one else) to make a contribution (of some relevant type) to something coming about. I have defended that analysis in [2007, 2016]. The goal in this section is to explain the original analysis sufficiently to make clear how it contrasts with Himmelreich's simplified version.

The account projects the event analysis of singular action sentences to plural action sentences, in light of their distributive/collective ambiguity. The classical event analysis of [1] is [1A]:

[1] I lifted the piano
[1A] (∃e)(agent(e, I) and lifting(e, the piano)),

where 'agent(e, x)' means 'x is an agent of e', and 'lifting(e, x)' expresses the type of event that the agent brings about—the rising of the piano—stripped of the implication of agency. Putting aside tense, there are three ways in which this analysis must be supplemented. First, we must add a condition that secures that there is only one agent of the lifting. There is no sense in which someone who lays a single brick in the Great Wall of China can truly say, 'I built the Great Wall of China.'[1] Second, we must add another event quantifier to represent the agent's primitive action (what the agent brings about, but not by doing anything else), which bears a bringing-about relation to the event expressed by the action verb (the consequent event). Third, we must add a parameter set by the action verb that determines the particular way that the consequent event is to come about from the agent's primitive action. To cause someone to die is to be an agent of his death, but it is not *ipso facto* to kill him because killing requires that one not, for example, hire an assassin to do it.

The result of adding the modifications is given in [1B].

[1B] (∃e)(∃f)([agent(f, I) & brings-about-directly(f, e)]
   & (only y = me)(∃f′)[agent(f′, y) & brings-about-directly(f′, e)]
   & lifting(e, the piano)).

Here, 'agent(f, x)' means 'x is a *primitive* agent of f', while 'brings-about-directly(f, e)' expresses the determinate form of the agency relation required by the action verb 'lift'. (I cannot *lift* a piano by hiring movers to do it for me.) This forms the basis for the account of the logical form of plural action sentences.

Plural action sentences like [2] are ambiguous between a distributive and a collective reading.

[2] We lifted the piano.

If we ask competitors at a strong man competition, after the piano lift, who lifted the piano, one might respond, gesturing to himself and three others, 'We lifted the piano', meaning that each of them lifted it individually. The logical form of [2] on the distributive reading is given in [2D].

[2D] [Each x of us](∃e)(∃f)([agent(f, x) & brings-about-directly(f, **e**)]
   & (only y = x)(∃f′)[agent(f′, y) & brings-about-directly(f′, **e**)]
   & lifting(**e**, the piano)).

For the collective reading, [2C], we give the event quantifier wide scope, and adjust the sole agency requirement to require that only members of the group relevantly contribute to bringing about the consequent event [Ludwig 2007: 363].

[2C] (∃**e**)[Each x of us](∃f)([agent(f, x) & brings-about-directly(f, **e**)]
   & (only y in us)(∃f′)[agent(f′, y) & brings-about-directly(f′, **e**)]
   & lifting(**e**, the piano)).

---

[1]For further discussion, see Oliver and Smiley [2001] and Ludwig [2007, 2016: ch. 3, sec. 4, chs 9–10].

This says that each of us, by something that he did, contributed directly to the piano's going up, and no one else so contributed.

3. The Discursive Dilemma

Himmelreich takes up a simplification of this account that accepts the analysis in [1A] and paraphrases [2] as [3].

> [2] We lifted the piano
> [3] $(\exists e)$[Each x of us](agent(e, x) and lifting(e) and of(e, the piano))

[3] is inadequate on the face of it, since it requires that the collective reading of [2] entails the distributive reading. This relies on the fact that

$$(\exists x)(\forall y)F(y, x) \rightarrow (\exists x)F(a, x)$$

is logically valid. On its collective reading, however, [2] does not entail the distributive reading. In contrast, the analysis of [2] in [2C], given what it presupposes about the logical form of singular action sentences in [1B], does not have this consequence. We return to this below.

Himmelreich's first argument draws on the discursive dilemma [Kornhauser and Sager 1993; List and Pettit 2011]. Three judges on a panel, deciding whether a defendant has breached a contract, vote individually on whether

  (i) the contract with the defendant is valid,
 (ii) the defendant breached the contract, and
(iii) due process was followed.

The defendant is guilty if and only if all three conditions are met. Court procedure requires a finding of guilt if a majority vote *yes* on each of contract, breach, and process. The judges vote as shown in Table 1.

Table 1 – The Discursive Dilemma

	Valid Contract	Breach	Due Process	Finding
Judge 1	Yes	Yes	No	No
Judge 2	Yes	No	Yes	No
Judge 3	No	Yes	Yes	No
Court	Yes	Yes	Yes	**Yes**

Himmelreich argues that, since

(1) no judge individually **finds** the defendant guilty, but
(2) the three-judge panel **finds** the defendant guilty,

an analysis like that in [3] cannot be right, because it requires each to find the defendant guilty. Applying the analysis in [3] to [4] yields [4c].

[4] The three judges found the defendant guilty.
[4c] ($\exists e$)[Each x of the three judges](agent(e, x) and finding-guilty(e, the defendant))

The three judges = Judge 1, Judge 2, and Judge 3. Therefore,

[J1/2/3] ($\exists e$)(agent(e, Judge 1/2/3) and finding-guilty(e) and of(e, the defendant)).

Given the analysis in [3]—together with the analysis assumed in [1A]—it follows that

[J1/2/3*] Judge 1/2/3 found the defendant guilty

But [J1*]–[J3*] are false, given (1). So, the analysis in [3] is inadequate. Himmelreich concludes that what the court does cannot be reduced to the individual contributions of the judges.

There are two problems with this argument.

[Equivocation] It equivocates on 'finds', which means one thing (1) but another in (2).

[Simplification] It relies on the simplified analyses in [3] and [1A] that require the collective reading of [2] to entail the distributive reading.

Equivocation. The judges carry out a decision procedure that takes input from multiple agents and results in an *official finding* of guilt. While the judges are guided by their best view of whether the defendant is factually guilty, the decision procedure results in a finding of legal guilt. Someone may be factually innocent but legally guilty (wrong conviction), or factually guilty but legally innocent (unconvicted). Since the official finding of guilt is the result of a *joint* decision procedure, no *single* agent could, in principle, carry out the procedure. No single agent could, in principle, have found (in this sense) the defendant either guilty or not guilty. Consequently, no individual judge finds the defendant guilty in the sense in which the panel does.

To say that none of the judges individually finds the defendant guilty is to report their individual judgments, on the evidence, of whether the defendant met the legal criteria for being guilty. Here 'guilt' means 'factual guilt'. Each judge's individual evidence-based judgment was that the defendant failed to meet the criteria for being guilty. This is not a finding of legal guilt, however, and could not be, given the procedure required for such a finding. In this sense, 'find' is not even an action verb.

We can rewrite the premises of Himmelreich's argument by adding subscripts to distinguish the different senses of 'find'.

(1) no judge individually **finds$_1$** the defendant guilty
(2) the three-judge panel **finds$_2$** the defendant guilty

We cannot derive a contradiction from (1)–(2) and the analyses in [4c]/[1A]. All that we get is that each judge finds$_2$ the defendant guilty. This does not contradict (1). So the reductio from (1) and (2), and the claim that [4c] is the analysis of [4], collapses.

Simplification. This would be cold comfort to a proponent of a reductive account of plural agency if [4c] were the best analysis that could be offered. While [4c] doesn't entail that

each judge finds₁ the defendant guilty, it does entail, together with [1A], that each finds₂ the defendant guilty—which is impossible. However, this relies on Himmelreich's *simplifications* of my analyses of both singular and plural action sentences. The application of the *original* analysis in [4C] of [4], together with the correlative analyses of [J1/2/3], does *not* have the consequence *that each of the three judges made an official finding*.

[4C] $(\exists e)$[Each x of the three judges]$(\exists f)$([agent(f, x) & brings-about-constitutively(f, e)]
    & [only y in us]$(\exists f')$[agent(f', y) & brings-about-constitutively(f', e)]
    & official-finding(e, that the defendant is guilty)]

For example, for Judge 1, [4C] entails [5].

[5] $(\exists e)(\exists f)$([agent(f, Judge 1) & brings-about-constitutively(f, e)]
    & [only y in us]$(\exists f')$[agent(f', y) & brings-about-constitutively(f', e)]
    & official-finding(e, that the defendant is guilty)]

That is, there is some event such that Judge 1 is an agent of it, and only those among the three judges are agents of it, and it is an official finding that the defendant is guilty.

However, [5] does not entail [6A], which is the analysis of [6] on my account [2007, 2016], because on that analysis singular action sentences also contain a sole agency clause.

[6] Judge 1 found officially that the defendant was guilty
[6A] $(\exists e)(\exists f)$([agent(f, Judge 1) & brings-about-constitutively(f, e)]
    & **[only y = Judge 1]$(\exists f')$[agent(f', y) & brings-about-constitutively(f', e)]**
    & official-finding(e, that the defendant is guilty)]

In fact, any value of e that witnesses [5] cannot witness [6A], because [5] requires any such event to have *multiple agents* in the relevant way, and [6A] *forbids* this. Thus, Himmelreich's simplification of the account leaves out something crucial.

Himmelreich also offers a supplementary argument of independent interest for what its diagnosis brings out about the relation of intention to joint decision procedures [2017: 89].

[Intention Argument]

1. The court convicts the defendant intentionally.
2. None of the judges intends for the conviction to occur.
3. One cannot convict someone unintentionally.
4. Therefore (from 1–3), none of the judges is an agent of the conviction.
5. Therefore, the multiple agents analysis is false.

This argument fails, for more than one reason. First, one can be an agent of a conviction without convicting someone. To convict someone is to be an agent of the conviction in a way that is partially constitutive of it. But I may be an agent of a conviction without doing anything that partially constitutes convicting anyone. I may buy a panel of judges and tell them what to do.

Second, and more interestingly, premise 2 is false. All of the judges intend for the conviction to occur. To bring this out, shift attention to a different version of the argument [ibid: 89n12].

> This argument rests on a contradiction between four premises. (1) Each judge is an agent of the conviction. (2) There is no other agent of the conviction. (3) There is at least one agent of the conviction that also intends to convict the defendant. (4) No individual judge intends to convict the defendant. Because this is a contradiction, one premise must be given up.

Himmelreich thinks that the case of the three judges supports (1), (3), and (4) (premise 2 above), and so rejects (2). I reject (2) also, as noted. There are other agents of the conviction, just not in the way that the judges are, in jointly enacting a decision procedure to determine the judgment of the court. Putting this aside, the crucial claims are (3) and (4).

(3) and (4) are underspecified. We may read (3) as (3i), the individual reading, or as (3c), the collective reading, and *mutatis mutandis* for (4) in (4i) and (4c).

(3i) There is at least one agent of the conviction who also intends herself to convict the defendant.

(3c) There is at least one agent of the conviction who also intends that they (the three judges) convict the defendant.

(4i) No individual judge intends *herself* to convict the defendant.

(4c) No individual judge intends that *they* (the three judges) convict the defendant.

Himmelreich thinks that (3i) is true. Why? Because he thinks that what the court (the three judges) does is done intentionally but 'none of the judges intend for this event to occur', which in turn is just (4) [ibid.: 89]. But then which reading of (4)? (4i) is clearly true (assuming that the judges are rational) because none of the judges could rationally intend to execute a joint decision procedure alone. But (4i) isn't what is needed. The argument requires that (3i) be the only plausible interpretation of (3). But if (4c) is false, then (3c) is true, and in virtue of facts about the judges. No additional agents are required. So, Himmelreich needs (4c) to be true. What motivates him to think that (4c) true is the thought that none of the judges could rationally intend that they convict the defendant, because none of them believes that the evidence supports the conclusion of guilt. This is the mistake.

The judges agree on the decision procedure and jointly intend to execute it. Each then intends that the result of the decision procedure be what they do together. They all recognize that an official finding of guilt (a conviction) is distinct from what they each individually think that the facts warrant (since they don't think that the defendant is factually guilty). So, there is no rational conflict between the intention that they execute the decision procedure, and their executing it intentionally, while each personally thinks the evidence insufficient for factual guilt. They each intend, beforehand, that if a majority votes *yes* on contract, breach, and due process, they will officially find the defendant guilty (that is, convict the defendant), and otherwise they will officially find the defendant not guilty (that is, acquit the defendant). When the antecedent is satisfied in the first case, each then intends that they convict the defendant; when the antecedent is satisfied in the second case, each then intends that they acquit the defendant. So, (4c) is false. Hence, (3c) is true. Therefore, no reading of (3) is needed that requires an agent over and above each of the three judges.

4. Realizing the Functional Organization of an Agent in a Group of Agents or Proto-Agents

The second and third examples appeal to the possibility that a group may realize a functional organization sufficient to be an agent, even though it is not true that whenever the realized agent does something its realizers do the same thing.

The first example is Block's [1978] thought experiment, in which the citizens of China realize the machine table for a human being, and are so connected to a human body that it performs appropriate actions. Grant functionalism, for the sake of argument. Himmelreich argues that in this case [7] can be true while its *paraphrase* is false because the realizing agents are just, for example, pushing buttons.

[7] The China-body system butters a slice of toast

The problem is that no paraphrase is called for. If functionalism is true, the China-body system is an individual agent. Thus, [7] is an action sentence about an individual, not a group. It is a singular action sentence. It is irrelevant that its realizers are agents. Claims about what *it* is doing are no more claims about *they* are doing, than claims about what I am doing are claims about what my molecular constituents are doing. [7] receives the analysis in [1B], not [2C]. It is not so much as relevant to the topic of group action sentences. The same point applies, even more obviously, to Himmelreich's other example—namely, the possibility of a hive mind, where the realizers may be only proto-agents.

ORCID

Kirk Ludwig http://orcid.org/0000-0002-9037-6292

References

Block, Ned 1978. Troubles with Functionalism, in *Perception and Cognition: Issues in the Foundations of Psychology*, ed. C.W. Savage, Minneapolis: University of Minnesota: 261–325.

Himmelreich, Johannes 2017. The Paraphrase Argument against Collective Actions, *Australasian Journal of Philosophy* 95/1: 81–95.

Kornhauser, Lewis A. and Lawrence G. Sager 1993. The One and the Many: Adjudication in Collegial Courts, *California Law Review* 81/1: 1–59.

List, Christian and Philip Pettit 2011. *Group Agency: The Possibility, Design, and Status of Corporate Agents*, Oxford: Oxford University Press.

Ludwig, Kirk 2007. Collective Intentional Behavior from the Standpoint of Semantics, *Noûs* 41/3: 355–93.

Ludwig, Kirk 2016. *From Individual to Plural Agency: Collective Action; Volume 1*, Oxford: Oxford University Press.

Oliver, Alex and Timothy Smiley 2001. Strategies for a Logic of Plurals, *The Philosophical Quarterly*, 51/204: 289–306.