

Goodman's 'About': the Ryle factor

Naomi Osorio-Kupferblum

naomi.osorio@univie.ac.at

University of Vienna

ABSTRACT

Nelson Goodman's paper 'About' (1961) was a milestone in aboutness theory. Although it has been much discussed, an interesting fact about it has so far been completely ignored: the important debt it owes to two papers it cites by Gilbert Ryle. With Ryle's 'About' (1933) it shares much more than the title – it, too, offers a three-fold account of different ways a sentence can relate to a subject matter and a separate account for fictitious objects. More importantly, although Goodman's approach is quite different, the inspiration for the crucial element in his account, 'differential consequence', may well have come from a parenthetical suggestion of entailment in Ryle's 'About'. The second essential tool Goodman uses, viz. compound predicates which incorporate the (fictitious) object, is also the crucial element in Ryle's 'Imaginary Objects' (also 1933). Goodman turns them into a predicate schema for fictitious subject matters as well as for a nominalist version of his account.

1. Introduction

Nelson Goodman scholarship often points to influences in his philosophy, the two most prominent certainly being Quine and Carnap. But there does not seem to be any mention of an influence by Gilbert Ryle on Goodman's work. In fact, there is not much literature bringing the two important philosophers together at all.¹ And yet, a truly seminal paper by Goodman takes not a little inspiration from Ryle's work: 'About' (1961). In the paper, Goodman develops a formal account of several different ways sentences can relate to their subject matters—'aboutness' for short. A flurry of papers followed Goodman's 'About', offering

¹This may be due to the differences mentioned in Cohnitz and Rossberg (2006) between Ryle's ordinary-language approach and Carnap's ideal-language project, with Goodman belonging to Carnap's 'camp'.

criticisms, replies, and complements to the account,² but for tracing Ryle's apparent influence, we need not go further than 'About' itself.

The paper not only shares its title with Ryle's 'About' (1933a), its structure is very similar and some basic ideas seem to be inspired by Ryle's views on the matter. More importantly, two essential tools Goodman employs, entailment and compound predicates, appear in Ryle's 'About', the latter also, and more prominently, in 'Imaginary Objects' (also 1933). In spite of the similarities, and although Goodman cites both papers (1961, 1 fn1), the connection between Ryle's and Goodman's thoughts on aboutness has hardly been noted so far.³

This is an omission not only in Goodman scholarship. Studying this influence should likewise be of interest to the currently very busy research area of aboutness theory. Highlighting echoes of Ryle in Goodman's paper will help us understand what philosophical considerations may have led Goodman to design his account in the way he did and what criteria he wanted it to meet. This in turn should be an important point of reference for current work on aboutness, much of which builds on Goodman's in one way or another. It is therefore what this paper aims to do.

But before we begin, the uninitiated reader may wonder why linguistic aboutness is even an issue? After all, we usually know perfectly well what a text—a book, article, poem, talk, etc.—is about, if and when we understand it. In fact, knowing what something is about seems to be intimately linked to understanding it. It is interesting to note, then, that spelling out how any piece of language relates to its subject matter(s) is astonishingly difficult. As Goodman put it, when speaking of 'all statements about a given event or object', we have 'a hard time specifying just what statements this covers, and an even harder time

²To name a couple: Rescher (1963), Patton (1965b), Patton (1965a), Goodman (1965), Putnam and Ullian (1965), Hodges (1971), Ullian and Goodman (1977), Ullian (1984), and even Niebergall as late as 2009.

³Exceptions, to some extent, are Yablo (2014, 23) and Osorio-Kupferblum (2016, 526–32). Hawke (2018) and Berto and Hawke (2022) mention both without apparently seeing the connection. Berto and Hawke (2022) think Ryle considered topics 'irredeemably vague or elusive'; it seems to me that this interpretation of his 'About' (which I don't share) may lead people to overlook Ryle's very important contributions to aboutness theory. These are the mentions in aboutness literature. I cannot find any mention of Ryle in connection with Goodman (1961) in Elgin (1983), Cohnitz and Rossberg (2006), or Ernst, Steinbrenner, and Scholz (2009).

giving a general rule'. (1961, 1) Why this should even be done, and why aboutness is of interest today, has been discussed by Yablo (2014, 1–22), Osorio-Kupferblum (2016), Hawke (2018), Berto and Hawke (2022, ch. 2), and for the purposes of truthmaker semantics, Fine (2017b). An important factor is certainly that formal tools, particularly in combination with bivalent logic, typically run into difficulties when distinctions of meaning more fine-grained than mere truth-conditions need to be accounted for. This is the case with hyperintensionality, where co-referring terms cannot be mutually substituted *salva veritate*, with the lack of closure of knowledge, the problem of logical omniscience (see Jago (2014) for an excellent explanation), and indirectly in connection with relevance or context relativity, for instance. Take the raven sentence from Hempel's 1945 confirmation paradox:

- (1) All ravens are black.

There is general agreement that it is about ravens, but is it also about blackness, or black things? Moreover, (1) is logically equivalent to

- (2) Every non-black thing is a non-raven.

So, is (1) also about non-black things, and about non-ravens? Views vary widely on these questions, and, accordingly, also their formalisations. Moreover, the development of formal tools for other purposes allows for parallel developments in aboutness theory (aboutness generally being an issue of greater concern to the formal than to the common-sense branch of analytic philosophy in the sense discussed by Dutilh Novaes and Geerdink (2017)).

Goodman's paper was a milestone in these endeavours. He starts by noting that only sporadic attention had been given to the question of what general rule might help decide whether a statement is about something. Goodman specifically names Ryle, Carnap and Putnam, only to point out that their discussions don't offer an adequate formulation of aboutness. Their works are cited in the first footnote, a good guide through our philosophical and, in part, historical investigation. The footnote runs:

G. Ryle 'About', *Analysis*, i (1933) 10–11; and 'Imaginary Objects', *Proceedings of the Aristotelian Society*, supplementary, xii (1933) 18–43. R. Carnap *The Logical Syntax of Language* (London, 1937), pp. 284–292. H. Putnam

'Formalization of the Concept "About"', *Philosophy of Science*, xxv (1958), 125–130. In the most recent of these, Putnam takes a quite different approach from mine, his basic concepts being those of a *state-description* and of *amount of information*. Where he touches on the same problems I consider here, his conclusions are in general also quite different from mine. (Goodman 1961, 1, fn 1)

The footnote is clear about Goodman's rejection of Putnam's approach. Putnam built on the concept of 'amount of information' taken from Kemeny (1953) and Bar-Hillel and Carnap (1953) and, like Russell (1903), has sentences come out only about the (grammatical) subject term; e.g., ravens in the Hempel sentence.⁴ Goodman disagreed with both ideas; so, if anything, Putnam's paper only prompted Goodman to offer an alternative. There is no other discernible influence from Putnam.

What the footnote does not specify is what Goodman likes and dislikes or finds wanting in Carnap's and Ryle's work, but we can gather much of that from the paper. We will see that both played important, albeit very different roles. The cited passage in Carnap's *The Logical Syntax of Language* (henceforth *LSL*), raises a complex issue Goodman responded to. A point of disagreement is made explicit in Goodman's footnote 1, page 9, but Carnap's passage also contains two positive aspects Goodman wanted to address in his account. We can take this as the starting point for Goodman's thoughts about aboutness and will begin the discussion here in Section 2.

But Ryle's two papers seem to have been the greatest influence on Goodman's account. Our aim here is to show what inspiration Goodman took from them in tackling the questions raised by Carnap's passage and to which his formalisation is designed to offer an answer. Section 3 will explain Ryle's theory of aboutness, and Section 4 will show how Goodman employed which of Ryle's ideas in his formalised account. Some degree of technicality is unavoidable in the exposition of the philosophical foundation of Goodman's account, but it will be kept as simple as possible. For an understanding of the kind and extent of inspiration Goodman took from Ryle's thoughts, a profounder grasp of the technical aspects will not be necessary.

⁴In Russell's early view in *Principles of Mathematics* (1903, sec. 48), 'Blackness belongs to all ravens' has a different subject matter from 'All ravens are black'—and *a fortiori* from 'All non-black things are non-ravens'. I thank Mark Textor for pointing me to this.

2. Carnap's Concept of Aboutness in *LSL*

The reference in Goodman's footnote points specifically to §74 *Pseudo-object sentences* and §75 *Sentences about meaning* in Carnap's *The Logical Syntax of Language* (1934/1937). They contain a passage about aboutness with a puzzling example but also an important insight which Goodman took good care to cater for.

Carnap's plan in *LSL* was to complement his earlier *Aufbau* (1928/1967) with a programme for making natural language amenable to the stringent requirements of Vienna Circle philosophy. Having distinguished between object sentences, typically reporting an observation, and syntactical sentences about linguistic expressions, the plan was to translate hybrids frequently occurring in science into the latter, thereby creating a 'logic of science' available for logical scrutiny—the core competency of philosophy (1937, 277–84). All meaningful philosophical problems would then just be problems of syntax. Thus, an object sentence like

(3) '5 is a prime number'

ascribes a mathematical property to a mathematical object. A syntactical sentence like

(4) '“Five” is not a thing-word but a number-word'

by contrast, says something about the linguistic properties of the word 'five' (marked by inverted commas).

Hybrids that we often come across, even in scientific texts, take two forms. One is pseudo-object sentences, which seem to say something about an object but are in fact about syntactical form (and therefore also quasi-syntactical sentences). Carnap's example is

(5) 'Five is not a thing but a number'.

This sentence looks at first glance like an object sentence because it seems to say something about the number 5, but it actually only says something about the word 'five', to wit what sort of word it is (1937, 285–86)—and that is characteristic of syntactical sentences. In order to tidy this up, (5) has to be translated into (4).

The other sort of hybrid is of the opposite form—sentences that look like syntactical sentences but have object-sentence characteristics

in that they say something about the content or meaning of linguistic expressions or statements of any of the individual sciences. Quasi-syntactical, these are also pseudo-object sentences. This issue effectively concerns semantics and subject matter. Carnap would realise soon after *LSL* that semantics is unavoidable, but here he attempts to provide a way of translating the second kind of hybrid sentence into a syntactical sentence, too.⁵ To show how this is done, Carnap now chooses an example of a longer sort of ‘linguistic expression’, a lecture. He writes:

Let us consider as an example the following sentence $\mathfrak{S}1$: ‘Yesterday’s lecture was about Babylon.’ $\mathfrak{S}1$ appears to assert something about Babylon because the name ‘Babylon’ occurs in it. In reality, however, $\mathfrak{S}1$ says nothing about the town Babylon, but merely something about yesterday’s lecture and the word ‘Babylon’. This is easily shown by the following non-formal consideration: for our knowledge of the properties of the town Babylon it does not matter whether $\mathfrak{S}1$ is true or false. (Carnap 1937, 285, §74)

This passage contains a number of puzzling aspects, but most of them would lead us off track. What concerns us here are three points Carnap makes. First, he points out that the occurrence of the name ‘Babylon’ makes us think that $\mathfrak{S}1$ is about the town of that name. In fact, later in the section he gives a *de facto* definition of aboutness when he states that:

[I]f, and only if, yesterday’s lecture was concerned with a certain object, did a designation of that object occur in the lecture. (Carnap 1937, 288)

The second point, which unfortunately contradicts the definition’s sufficiency criterion, is that when determining aboutness, we must distinguish between statements about objects and statements about words or other linguistic expressions. In many instances, including this one, this amounts to what we consider today the use/mention distinction.

The third point is contained in the ‘non-formal consideration’ that the truth of $\mathfrak{S}1$ should matter for our knowledge of the properties of Babylon. What Carnap effectively says here is that for a statement to be about a subject matter, it should reflect or add to what we know of that subject matter. We might just think of this as the statement being relevant to the subject matter.

⁵See e.g., Limbeck-Lilienau (2012), Leitgeb and Carus (2022).

The first point and the definition have been widely criticised. It has been pointed out that the occurrence of the name is not *necessary* for the lecture to be about Babylon (Kokoszyńska 1936; Woleński 2003; Wagner 2009); that it is not *sufficient* (Curry 1951); and, indeed, that the name's occurrence is *neither necessary nor sufficient* for the lecture to be about Babylon (Bouveresse 2009; Doyle 2013; Osorio-Kupferblum 2016). We will see that Ryle shared the view of the last group of critics, as does Goodman, who writes that

mention of *k* by *S* is neither a necessary nor a sufficient condition for *S* to be absolutely about *k*. (Goodman 1961, 9)

And in a footnote:

Contra Carnap, who (in the passage cited in note 1, p. 1) regards mention of Babylon by *S* as both a necessary and a sufficient condition for *S* to be about Babylon. (Goodman 1961, 1 fn1)

This is the point of disagreement with Carnap Goodman expressly mentions; he goes on to give the reason:

Carnap's definition does not meet the requirement that logically equivalent statements are about the same things. My definition is designed to meet this requirement without yielding the anomalous result that every statement about anything is about everything. (Goodman 1961, 1 fn1)

But if the occurrence of a name or other sort of definite description is neither necessary nor sufficient for a statement, lecture, or other sort of text to be about what that term denotes—we shall call this the 'problem of occurrence'—this raises the crucial question what else makes it relevant to that subject matter. This is the question aboutness theory has been struggling with ever since. Goodman's account has marked the philosophy underlying the different formalisations developed since his paper. His proposal also caters to Carnap's 'non-formal consideration' and the distinction between the use and the mention of a word derived from it. We shall see that Goodman achieves both by demanding that statements say something of consequence about a subject matter in order to count as being about it, a thought we find today reflected in truthmaker inclusion—in Yablo's account, inclusion of sets, in Fine's, the mereology of states.

Carnap's non-formal consideration proposes one of the few aspects of aboutness not covered in Ryle's immensely rich account, to which we turn next.

3. Ryle's Concept of Aboutness

We have seen that in *LSL*, Carnap unwittingly illustrated the problem of occurrence, raising the question what determines aboutness. Suggestions for solving it can be found in what seems to be the biggest conceptual influence on Goodman's account, Ryle's short, but immensely important 1933 paper 'About'. In 'About' Ryle answered some of Braithwaite's and Moore's objections at the Aristotelian Society symposium 'Imaginary Objects' earlier that year, itself inspiration for an essential tool in Goodman's account.

Ryle starts from a grammatical approach to aboutness, but it transpires very quickly that grammar is no guide to *whether* a sentence *S* is about some object *Q*, but only *in what way* *S* is about *Q*. He proposes three linguistic sorts of aboutness, called 'about (l)', and one philosophical one, to which we will get later.

The first sort of 'about (l)' is found in sentences where 'Q' is the grammatical subject, usually occurring in the nominative case. In his example

(S) I climbed Helvellyn

that 'Q' would be 'I' and sentence *S* thereby about-nominative or 'about (n)' me.

But sentences are, of course, not only about their grammatical subject, Ryle thinks (*pace* Russell and Putnam). After all, *S* doesn't only tell us something about me, it also tells us something about Helvellyn. So, the second sort of linguistic aboutness Ryle proposes is *S*'s being 'about-substantival' or 'about (s)' *Q* when 'Q' is not the subject, but a noun, noun phrase or pronoun in object position. Thus *S* is 'about (s)' Helvellyn.

Finally, one further grammatical step remote, there is a third sort, 'about-conversational' or 'about (c)', and it is here that Ryle addresses a number of very important issues that will help deal with the Carnapian problems. He starts by pointing out that among the nouns in a sentence, there is often one which is naturally thought of as that which is being talked about, because it is the central topic in the conversation or discourse of which *S* is a part. This can take various forms: (i) 'Q', but no other noun, noun phrase, or pronoun, is contained in all or most of the sentences in that conversation or discourse; (ii.a) 'Q' is replaced by a synonym or paraphrase, or (ii.b) alluded to or referred to indirectly. But

'about (c)' allows for even more grammatical variation: (iii) S can even be 'about (c)' something that is never represented by a noun phrase but only by other parts of speech such as verbs or adjectives. Thus, our (S) above is 'about (c)' climbing. (ii) and (iii) both show that the occurrence of a word is *not necessary* for the sentence to be about what the word stands for. Moreover, (iii) means that there is hardly a part of speech that could not potentially represent such a central topic of conversation. However, most of the time, there are words all or most sentences in a discourse have in common without them representing a common topic at all. Ryle's examples are 'the', 'was', and 'not'. So the occurrence of a word is *not sufficient* either for the sentence to be about what the word stands for—Ryle was the first to describe the problem of occurrence.

In discussing these three forms of linguistic aboutness, Ryle mentions two more things of importance almost in passing. One is that a word's position in the sentence or vocal stress often indicate that it signifies the central topic. This is something linguists are well aware of—indeed, it was an important aspect in the Prague School's theme/rheme distinction (today topic/focus)—but it represents considerable technical problems for formal methods of dealing with aboutness.

The other thing is an explanation he added to (ii.b) namely that sentences which 'allude or refer indirectly to Q'

entail propositions which if put into words would contain 'Q' or some synonym or paraphrase. (Ryle 1933a, 11)

This idea of explaining (ii.b) through entailment was to become the crucial element in Goodman's three types of aboutness, as we shall see below. In Goodman's work, it took the form of 'differential consequence', but entailment is an idea that has lived on and still prospers in various forms in today's work in aboutness theory.

But the more prominent fact, namely that Ryle gives accounts of various ways a sentence can be about a subject matter, is also not lost on Goodman, although he will represent this not as grammatical variation but rather as various logical degrees of aboutness.⁶ Moreover, Goodman will give an account for propositions rather than sentences. Whereas Ryle's different forms of aboutness are based on grammar, such that *how*

⁶It is worth noting that the differentiation between nominative and substantival cases in Ryle's 'about (l)' is not reflected in Goodman's threefold account; instead, Goodman draws a distinction between Ryle's options (ii.b) and (iii) in 'about (c)'.

things are said is crucial to aboutness for him, Goodman's depend on logic. For Ryle, the fact that substantival, and even conversational cases can usually easily be transformed into nominative cases of aboutness plays no role in his explanation. Ryle's account is for the sentence rather than the proposition.

But this is not the end of Ryle's account, nor is it the end of what Goodman should take on board from it. In a last step, Ryle turns from the linguistic to the philosophical issues and draws a distinction between sentences 'about (I)' a material object in the world and those 'about (I)' a fictitious or conceptual object like Pickwick or the Equator. The former sort of sentence contains a 'logically proper name' or a definite description, and there is an object Q thus properly referred to.⁷ They are thereby also 'about-referential' or 'about (r)' Q, something the latter group of sentences can never be. The latter sentences are 'about (I)' Q all right, but it is a mistake to infer any sort of 'being' for their subject matters from the sentences' mere linguistic aboutness.

A way out Ryle suggests for at least some of these problematic cases is to create a compound adjective, for instance 'on-the-Equator'. Thus, 'The Equator is 2,500 miles from Oxford' can be rephrased by defining the property 'x is on-the-Equator, if x is equidistant between the poles' such that Oxford is then 2,500 miles from the place nearest to it of all the places that are 'on-the-Equator'. (Ryle 1933a, 12) This solution is explained in great philosophical detail in 'Imaginary Objects', where Ryle offers a threefold account of imagination: 'non-fabulous' for imagining something to be the case with a real object, 'fabulous' for imagining something to be the case with an imaginary object, and 'mixed imagining' when we mix the two in imagination (e.g., fictitious Mr. Pickwick to be locked up in real Fleet prison).⁸ Fictitious characters are not strictly speaking created, because what is created is thereby made to exist and fictitious characters don't exist. What is instead created is the story. The story then consists of propositions which list characteristics the author

⁷Ryle lists 'logically proper names' as an option, in response to Braithwaite and Moore, giving room to Russell's 1903 view, but adds that he doesn't think there are any. (1933a, 11) In his (1933b, 36) he explains that 'only then is a proposition 'about' something when it makes sense to ask of it not merely 'what is it about?' but 'which of the so and so's is it about?' Goodman clearly did not share this view, but Putnam's account, which only caters for classes of objects, matches it well.

⁸Lamarque (2014) draws an interesting further distinction between real objects occurring in what Ryle considered non-fabulous and mixed imaginings.

uses to pretend to designate someone. What the author thereby does is 'to compound a highly complex predicate and pretend that someone had the characters so signified'. (Ryle 1933b, 39) So, 'what Dickens "created" was not an individual with an odd status but a complex predicate' (Ryle 1933b, 40), as, in fact, the 'Pickwick Papers is one big composite predicate' (Ryle 1933b, 39). On this account, 'The Equator is 2,500 miles from Oxford' is therefore a mixed imagining. Although the property of being 'on-the-Equator' is analysed as not purely imaginary, but as a set of real objects sharing a real characteristic, the solution of packing the fictitious element into a property of a real object is the foil Goodman will use to explicate aboutness of fictitious objects.

Note, however, that Ryle regards the object's ontological status as relevant only for philosophical or logical purposes; he stresses that it makes no difference for linguistic aboutness.⁹ 'About-referential', as its name implies, is intimately linked to reference, and reference, Ryle thought, is only possible when there is some material thing in the world we can pick out with the referring term. This consideration is irrelevant while we are concerned with sentences and their component parts. We will see that Goodman, whose account is a logical one, marks the difference between real and fictitious objects very clearly. It seems to me that he thereby conflates reference and aboutness, and a text's truth and its relation to its subject matter (more on this below).¹⁰ Later modal accounts like Lewis's (1988a, 1988c, 1988b), Yablo's (2014, 2016, 2017, 2018, Forthcoming), and Fine's (2017c, 2017a, 2017b, 2020), overcome this issue. That said, aboutness continues to play an important role in the philosophy of fiction (e.g., García-Carpintero 2019; Plebani 2021; Lamarque 2014; Osorio-Kupferblum 2024, Forthcoming) and imagination (e.g., Berto 2018, 2022; Badura 2021) as well as in hyperintensionality (e.g., Berto and Nolan 2021; Jago 2014; Leitgeb 2019). Goodman and Ullian, individually and jointly, also adapted and complemented the 1961 account over the following years (Goodman 1965; Ullian 1962; Ullian and Goodman 1977).

⁹While most of today's accounts of subject matter are modal or not concerned with ontology for other technical reasons (see Plebani and Spolaore 2020), Schipper sustains a live interest in the topic (see Schipper 2020, 2021).

¹⁰Hawke, Hornischer, and Berto (2024) also argue for the distinction.

4. Goodman's Account of Aboutness

The thoughts from Carnap and Ryle about aboutness which Goodman deals with in his own account were therefore the following:

- I) For a sentence to be about something, its truth must matter for our knowledge about that thing (Carnap's 'non-formal consideration').
- II) The occurrence of a denoting term is neither necessary nor sufficient for a sentence to be about the *denotatum* (the problem of occurrence).
- III) In particular, the mere mention (rather than use) of a denoting term does not establish aboutness. (This follows from (I.) and (II.), but the distinction is stressed by Carnap.)
- IV) Aboutness can be established by entailment of another proposition that is directly about the thing in question (Ryle's aside on 'about (c)').
- V) Sentences can be about something in different ways—aboutness comes in degrees (Ryle's three forms of 'about (l)').
- VI) Ontological status counts: for a sentence to be about a thing, that thing must be real; otherwise it must be packed into a property predicated of that sentence (Ryle's 'about (r)' and account of fiction).

Let us now see how Goodman merged all these considerations into his own, seminal account of aboutness.

4.1. The extent of the problem

Goodman begins his paper by impressing on the reader the sheer magnitude of the problem of aboutness. First he shows—in line with Ryle's 'about (c)' and against Carnap's definition—that the occurrence of a word is not necessary for the sentence to be about what it designates. Yes, the sentence

- (6) Maine has many lakes.

is clearly about Maine. But since Aroostook County is in Maine, it would seem that the sentence

(7) Aroostook County grows potatoes.

is also about Maine. Carnap's non-formal criterion is met as well, as (7)'s truth matters for our knowledge of the properties of Maine. And for the same reason, since Maine is in New England,

(8) New England is north of Pennsylvania.

is about Maine, too.

Next, Goodman shows that the occurrence of the word 'Maine' is not sufficient either for a sentence to be about Maine. For one, there is Carnap's use/mention problem:

(9) 'Maine' has five letters.

is clearly not about the state of Maine. But there is also the issue of logically valid but irrelevant sentences like tautologies, or true statements like 'Florida is Democratic' (when Goodman wrote the paper) augmented into disjunctions such as

(10) Maine or Florida is Democratic.

which uses 'Maine' all right but does not say anything about Maine by Carnap's non-formal consideration because what Maine is like is irrelevant to the truth of the sentence.¹¹

Now, what (7) and (8) have in common is that their logical subjects Aroostook County and New England stand in a relation of parthood to Maine. Maybe that relation suffices to make them be about Maine, too? (David Lewis (1988a, 1988c, 1988b) would later think it did, and Kit Fine (2020) also takes a mereological approach.) The trouble is that if we accepted this without further qualification, every sentence would come out as about anything because everything is part of the universe, so every sentence would ultimately be about the universe and hence about anything in it. But even if there were a stop-block to this, parthood doesn't seem the right choice. Take:

(11) New England borders on New York.

¹¹Note that this example is highly controversial. It depends not only on how (10) is parsed (Elgin 1983), but also on our understanding that 'Maine or' is added to a true sentence. In Ullian and Goodman (1977) we get a better account of 'about' vs. 'true about'. (see also the next footnote)

Although Maine is part of New England, it clearly does not border on New York and (11) is therefore not true of Maine. So it seems counter-intuitive, Goodman evidently thought, to claim that (11) is about Maine (this conflates truth and aboutness, an issue only resolved by later generations of aboutness theorists, including Goodman in collaboration with Ullian).¹² We need another criterion, and it has to be one that not only solves the problem of occurrence, it also needs to ensure that the sentence does not come out as being about anything at all.

4.2. The selection criterion

This takes us to a very important conceptual contribution Goodman made to aboutness theory. In order to pin down why some of the examples above seem arbitrary and fail to justify aboutness, Goodman points out that, intuitively, aboutness shares an important aspect with selection. He says:

... 'about' behaves somewhat as 'choose' does. If I ask Johnny to choose some presents and he replies 'I choose everything', he has not chosen anything. Choosing something involves not choosing something else. That Johnny chooses every x is always false. Likewise, saying so and so about an object involves not saying so and so about some other. Nothing said about every object is said about Maine. (Goodman 1961, 5; Goodman 1972, 251)

So, a sentence is only about an object if it says something about that object that it doesn't also say about everything else in the universe.

This requirement therefore contains two aspects, (i) the positive one of picking out something, and (ii) the negative one of not selecting something else, and Goodman insists that there must be a non-selected remainder.¹³ How to achieve this while preventing mere mention (II.) and catering for cases where sentences don't contain an explicit designation of what they are about (Ryle's ii.b)?

¹²Elgin (1983) gives an excellent explanation of how 'about', 'true of', 'true about', and analogously 'false', differ, as discussed in 'Truth about Jones' by Ullian and Goodman (1977), partly reprinted in Goodman (1984). S can be about Jones and false without being false about Jones. But this does not concern our present topic.

¹³Lewis failed to make this proviso, which resulted in a major flaw of his account (a topic for another day). In Yablo's account, by contrast, the 'subject anti-matter', better known as 'falseways', plays a crucial role (see his debate with Fine: Yablo (2014); Yablo (2016); Yablo (2017); Fine (2020)).

Ryle had suggested that even sentences which only allude to a subject matter will entail a proposition containing direct reference to that subject matter (IV.). Goodman now makes the entailed sentence the core element of his definition. He thereby brings in a second sentence, but unlike Carnap's, it is not a translation into a more formal language—Goodman's pluralistic-constructivist views would not allow for somewhat arbitrary preferences of one 'language' over another, nor assume translatability between 'languages'.¹⁴ Instead, Goodman just wanted to remain within one language or logic. So, his demand on the second sentence is only that it follow logically from the first. The initial version of the definition runs: A statement *S* is about an object *k* if another statement *T* follows logically from *S* with respect to *k*. This caters for (i), picking out a subject matter.

But he still needs to cater for (ii) and prevent a statement coming out as about anything at all, i.e. ensure that the selection criterion is met. So additionally, he introduces the requirement that no generalisation of the statement with respect to a particular object should follow logically from it. This means that for an expression *E*, say 'Maine', in *S*, no statement *T* in which every occurrence of *E* is replaced by a variable governed by a universal quantifier should follow from *S*. Thus, while (10) above follows logically with respect to Maine from 'Florida is Democratic', so does its generalisation

(12) $\forall x$ (x or Florida is Democratic).

So, (10) is not about Maine.

Sentences that meet this requirement of selectivity *follow differentially* from another sentence with respect to the subject selected. Goodman's formal definition of differential consequence therefore runs:

A statement *T* follows from *S* differentially with respect to *k* if *T* contains an expression designating *k* and follows logically from *S*, while no generalization of *T* with respect to any part of that expression also follows logically from *S*. (Goodman 1961, 7)

Goodman thus corrects Carnap's mistaken idea of demanding the occurrence of a designation of the object, by implementing Ryle's suggestion; the requirement of occurrence now applies not to the statement itself, but

¹⁴See Elgin (1998); that such translatability is itself doubtful has been pointed out by Quine and, more recently, Restall (2002).

to one following logically from it. Differential consequence is Goodman's stop-block against *S* coming out as about anything at all.

Nevertheless, there is still a difference in the way (6) and (7) above are about Maine, and it is not just about occurrence but also about degree. Like Ryle, Goodman thinks sentences can be about a subject matter in different ways, but unlike Ryle, he doesn't think that this is a matter of grammar, and thereby syntax, but of content, and thereby logic. With the help of differential consequence, he defines three logically different forms of aboutness. Let us look at them in detail.

4.3. Goodman's three degrees of aboutness

4.3.1. Absolute aboutness

There are some sentences that are straightforwardly about some object *k*, in the way (1) above is about Maine. These, Goodman (1961, 7) considers to be *absolutely about k* and defines as follows:

A statement *S* is absolutely about *k* iff some statement *T* follows from *S* differentially with respect to *k*.

In (6) *k* (Maine) is referred to by its proper name, but we also have sentences containing designations of classes instead, like ravens Hempel's

(13) Ravens are black.

But Goodman's definition of absolute aboutness not only yields the class of ravens as our *k*, it also makes (13) come out as absolutely about black things. Goodman mistakenly thought that Ryle disapproved (Goodman 1961, 7–8), but Ryle explicitly allows for adjectives, verbs, and indeed any other part of speech, to establish aboutness (Ryle 1933a, 11). In fact, for Goodman, as for Ryle—but not for Putnam—(13) is also about the complementary classes of non-black things and non-ravens, because

(14) Non-black things are non-ravens.

is entailed by (13) and contains the necessary designations. (14) thereby meets Ryle's 'about (c)' condition, and follows differentially from (13) with respect to them both for Goodman. As this consequence is unwelcome in some contexts outside logic and mathematics, Goodman offers an alternative, 'immediate aboutness', that avoids this outcome. Before

turning to it, there are two further upshots from absolute aboutness worth mentioning.

One upshot of Goodman's definition is that he cannot cater for a theme/rheme distinction, or determine what Ryle called the 'central topic of the conversation or discourse'.

Another upshot is that a sentence and its negation come out as being about the same thing, since it is objects and the property classes referred to that are picked out by differential consequence. This has become one of the very few generally accepted aspects in aboutness theory.

4.3.2. Immediate aboutness

The definition of *immediate aboutness* ensures that a sentence is not 'immediately about' things not named or designated in it. This is a concession Goodman makes somewhat grudgingly and not without stressing that giving up the principle that logically equivalent statements should be about the same things makes this alternative have 'only occasional utility and moderate theoretical interest, and need not detain us longer' (Goodman 1961, 13). It runs as follows:

A statement *S* may be called *immediately about k* if *S* follows from itself differentially with respect to *k*—and therefore both mentions and is absolutely about *k*. (Goodman 1961, 12)

'Mentions', here, is not to be understood as the opposite of 'use' but rather in the sense of occurrence. Note that here, there is no second statement *T*. Some designation of *k* in *S* is therefore necessary for *S* to come out as immediately about *k*. However, occurrence is still not sufficient, as mere occurrence would not yield differential consequence with respect to *k*. So, in line with Carnap's non-formal consideration, the definition still ensures that *S* predicates something of *k*.

Although Goodman considers giving up the equivalence principle a disadvantage, for hyperintensional contexts, and therefore ordinary human communication, it is quite appropriate. We don't know, nor even believe, everything that follows logically from propositions we do know. Much of what is expressed in natural language, even in statements of facts, cannot be subjected to the stringent rules of bivalent logic. This is something Ryle and Carnap are apparently more sympathetic to than Goodman; Ryle knows that philosophers have more stringent

requirements than ordinary language users, and Carnap explains how to translate ordinary statements into language meeting stringent requirements. Relevance, and relevant logics, too, are logical concerns linked to aboutness.¹⁵

However, relevance is also closely linked to Goodman's next proposal, perhaps the most interesting part of Goodman's account.

4.3.3. Relative aboutness

Following the two accounts for absolute and immediate aboutness, *relative aboutness* completes Goodman's solution to the problem of occurrence (II.) and, more importantly, the problem of degree (V.).

In immediate aboutness, it is not sufficient, but necessary for a designation of *k* to occur in a sentence in order for that sentence to be about *k*. In absolute aboutness, the occurrence of a designation of *k* is neither necessary nor sufficient for *S*'s being about *k*, but *S* needs to say something of direct consequence about *k*. *K* can therefore be the logical contrapositive of something designated in *S*. Still, as (2) and (3) illustrate, Goodman thinks a sentence can be even less directly about something. But whereas Putnam, and later Lewis, give accounts of degree that set the screw at the object of aboutness and take a quantitative approach—Putnam by calculating proportions of information, and Lewis by offering various accounts of parthood (1988c)—Goodman, like Ryle before him, sees the variation in the relation itself, i.e., in how various objects of aboutness stand to the sentence. His account should, of course, continue to build on the principle of selection and logical consequence.

But this is no easy thing to do. After all, selection does not come in degrees—you either choose something or you don't; nor does logical consequence—something either follows logically or it doesn't. But we already have a hint what to do about this from the difference between absolute and immediate aboutness. Whereas in immediate aboutness, *S* follows from itself, in absolute aboutness, a second statement *T* follows from our statement *S*.

In relative aboutness, Goodman now wants to cater to the intuition that, for instance, statements about Aroostook County are also about Maine, however in some sense that is different from statements *absolutely*

¹⁵Lewis' 1988c is a direct reply to relevant logics' concern about implication, as are Yablo's and Fine's theories. See also Krämer (2023).

about Maine. The ingenious solution is to spell out what makes them seem to be about Maine, namely our knowledge that

(15) Aroostook County is in Maine.

This formerly implicit information links (7) to Maine, so (7) is about Maine relative to (15)—we have thereby got a third statement.

The technical difficulty lies once more in selection. Goodman needs to make sure again that relevance is guaranteed, such that a sentence like

(16) Ghana is tropical and Maine prospers

is excluded from counting as a valid link. Differential consequence on its own cannot provide for this. So Goodman introduces the concept of *unitary consequence*, roughly one that cannot be split in the relevant places. Technically, a unitary consequence is a statement in which any conjunction sign which might link objects k and l in T is captive, i.e., within the scope of the existential quantifier, and the statement cannot be modified to remove the conjunction from there.¹⁶

With this in place, Goodman now requires the conjunction of statements S and Q to take us to their unitary consequence T . The resulting definition is that

S and Q are about k relative to each other if and only if some unitary consequence T of $S \cdot Q$ follows differentially with respect to k from $S \cdot Q$ but not from either S or Q alone. (Goodman 1961, 16)

We now have differential consequence with respect to k from two statements jointly. The fact that Aroostook County grows potatoes is thereby understood as telling us something about Maine because Aroostook County is in Maine. Note that the link between Aroostook County and Maine just happens to be a relation of parthood in this particular case; Goodman's account caters for any connection between an absolute and a relative topic as long as that relative topic follows by the applicable set of logical rules (on which he abstains from judgment).

This takes us to VI., the last point in our list, i.e., the concern with the subject matter's ontological status.

¹⁶A very detailed explanation of this step in Goodman's formalisation can be found in Elgin (1983, 164–65).

4.4. Rhetorical aboutness

Immediate, absolute and relative aboutness represent three different degrees to which a statement can be about a subject matter. This mirrors Ryle's three degrees of 'linguistic aboutness'. But we saw that Ryle also drew a distinction between sentences about material objects in the world and those whose object is 'imaginary', i.e., fictitious or conceptual—a distinction he considered to be of philosophical relevance, between statements possessing and statements lacking logical import. So, Goodman exaggerates when he says (1961, 18) that for Ryle, a statement like

(17) Pickwick fell

only *seems* to be about Pickwick. Ryle explicitly considers it 'about-linguistic' Pickwick, although it is certainly not 'about-referential' Pickwick. Reference needs an object, and Pickwick isn't one. But the mistake highlights that Goodman takes his accounts of aboutness to be ontologically analogous to Ryle's 'about-referential' rather than his 'about-linguistic'. For Goodman, aboutness is a 2-place relation between a statement and a material object. Where there is no such object, it is about 'nothing', i.e. the null class. The obvious problem is then that

(18) Poirot smiled

is about the same object as (17). But remember that Ryle considered stories compound predicates (1933b) and converted a statement 'about (l)' the Equator into one containing the predicate 'on-the-Equator' (1933a). Goodman uses exactly this solution and offers an additional account of 'rhetorical aboutness' for fictitious objects, consisting of a one-place predicate schema of '___-about', such that (17) is Pickwick-about and (18) Poirot-about, in addition to their being absolutely about the null class. Likewise, (1) is Maine-about, in addition to being absolutely, and indeed, immediately about Maine.

This predicate schema is *prima facie* a syntactical tool in Carnap's sense and avoids the problem of occurrence. It requires the word filling the gap left of '-about' to occur in the sentence of which such aboutness is to be predicated. Goodman also stresses that such predicates are inseparable—'Pickwick', 'Poirot', 'Maine' cannot be peeled out from

'Pickwick-about', 'Poirot-about' or 'Maine-about'.¹⁷ They can therefore not even serve as 'quasi-objects' for logical purposes. This means that we cannot use them to figure in differential consequence in the same way as 'real' objects do; we now need a different technical solution for picking out the subject matter, viz. term-differentiability:

A statement *T* follows *term-differentially* from *S* with respect to a term *E* of *T* if and only if *T*, but no generalization of *T* with respect to any term of *T* that is part of *E*, follows logically from *S*. (Goodman 1961, 19)

Thus, (17) is Pickwick-about because it yields some statement *T* that follows term-differentially with respect to 'Pickwick'. The definition of rhetorical aboutness is then:

S is ___about if and only if some statement *T* follows from *S* term-differentially with respect to '___', where both blanks are filled in any one case by the same expression. (Goodman 1961, 20)

This establishes the schema as desired. Note that what is absolutely about *k* therefore need not be *k*-about.

Now, Goodman thinks that in the case of Maine and all other real objects, rhetorical aboutness is not of great interest—instead, we will be interested in absolute aboutness. Conversely, for fictitious objects, absolute aboutness is uninteresting, whereas rhetorical aboutness is important. Rather perplexingly, he then states that 'the practical man seldom needs to consider rhetorical aboutness'. He suggests that for practical applications such as archiving, 'he may simply assume that all terms of statements in these documents designate'. It is not clear why this assumption could not be made by philosophers, too, but here again, Goodman follows Ryle in reserving the distinction for philosophical purposes.

Goodman uses the predicate schema again in the last section of his paper. He makes a proposal for nominalism, his favoured ontology, that avoids talk of classes and generalisation. It runs:

¹⁷A reviewer points me to Goodman's (1968) and (1970) where Goodman qualifies inseparability—or, as he calls it in (1972, 122–23), 'unbreakability'—allowing that 'unicorn-picture', for instance, may be understood as conjunctive, and thus as short for 'is a picture and is of-a-unicorn'. This allows for the inference from 'p is a unicorn-picture' to 'p is a picture' while preventing the mistaken inference that there is something (that is a unicorn) of which p is a picture.

S is ____ about if and only if S yields logically some statement T of which " ____ " is a term, while for no term E of T that is part of " ____ " does S yield logically every statement obtained from T by putting for E an expression of the same syntactic category. (Goodman 1961, 23)

Once more, Ryle's suggestion finds useful employment in Goodman's account of aboutness.

5. Conclusion

This paper has traced back the philosophical ideas underlying Goodman's seminal paper 'About' to Ryle's two 1933 papers on aboutness. Likely prompted by discontent with Putnam's approach, we saw that Goodman responded to two aspects in Carnap's Babylon passage in *LSL*. It was designed to solve the problem of occurrence, and to cater for Carnap's requirement for a text to be about a subject matter—what it says should matter to our knowledge of the properties of that subject matter. From these it follows that the distinction between use and mention of the subject matter's name, or other denoting term, is crucial.

The way of meeting these requirements owes a large debt to Ryle. In addition to the title and, indeed, the structure of the paper, we find several useful ideas and two essential tools from Ryle's paper mirrored in Goodman's formalisation of the concept of 'about'. For one thing, there is the idea that aboutness can vary in extent. Goodman offered a—like Ryle's—three-fold account for different ways in which a sentence S can be about a subject matter k , but opposing both Putnam's purely quantitative and Ryle's grammatical approach, in Goodman's account aboutness is a *logical* relation between S and k — S has to say something of (logical) consequence about k . The technical solution was again inspired by Ryle, viz. Ryle's aside on entailment in cases where k is not directly referred to in a sentence. Goodman achieved this by having another sentence T follow from S with respect to k for the first case. As Goodman's second, grudgingly conceded, option, S can follow from itself with respect to k and thereby mention k . And as the third option, Goodman's ingenious solution to more remote cases, T follows from S and a third sentence Q , where Q spells out how k relates to S 's more immediate subject matter(s).

Another highly significant contribution Goodman made to aboutness theory was the criterion of selection. The idea is compared to choosing: choosing something means *not* choosing something else. Likewise, a sentence can only count as about some *k*, if what it says about *k* isn't likewise true of anything else whatever. This is Goodman's way of catering for Carnap's requirement and achieved by what he called 'differential consequence'. So in all three options, it is not mere logical, but differential consequence that is required for *S* (or *S* and *Q*) to be about *k*.

Finally, Goodman also shared Ryle's view concerning the need for an ontological distinction between subject matters that exist in the world and those that are fictitious. They both thought that sentences about the latter are all strictly speaking about the same thing: nothing. But we clearly want to have an account that does not let a sentence that speaks of Pickwick come out as about the same thing as another that speaks of, say, Poirot. To solve this problem, Goodman, like Ryle, packed the fictitious object into the adjective, such that the sentence 'Pickwick fell' is Pickwick-about, whereas 'Poirot smiled' is Poirot-about.

Goodman's 'About' is one of the most important contributions to aboutness theory. By tracing its philosophical influences, in particular Ryle's, this paper aimed to explain what considerations led Goodman to offer his seminal account. For Goodman scholarship, this highlights an overlooked debt to Gilbert Ryle; for aboutness theory, it highlights a number of requirements accounts of aboutness should meet.

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