The Unity of Goodman's Thought¹

Abstract

I argue that Goodman's philosophy should not be characterised in *opposition* to the philosophy of the logical empiricists, but is more fruitfully interpreted as a *continuation* of their philosophical programme. In particular, understanding Goodman's philosophy as a continuation of the ideal language tradition makes explicable how a radical ontological relativist could be such a staunch nominalist at the same time.

1. Introduction

The 100th anniversary of Henry Nelson Goodman's birth is certainly not the only reason why it might seem timely to have a new look at his philosophical achievements. Goodman's systematic contributions in the philosophy of logic and mathematics, as well as his work on constructional systems, are at present again at the centre of interest for contemporary systematic endeavours and enjoy a certain revival.

His anti-foundationalist attitude towards logic reappears in the work of modern logical pluralists. His metamathematical theory of part/whole-relations as codified in his "Calculus of Individuals" (more familiar under the name "mereology") is nowadays becoming a standard tool to supplement set theory (formerly known as the "calculus of classes") in ontological representation systems or even to replace set theory completely

1

¹ This paper or parts of it were presented at several occasions, including the Congress of the European Society for Analytic Philosophy (ECAP) in 2005, the Congress of the German Association for Analytic Philosophy (GAP) in 2006, the conference on occasion of Goodman's centenary in Munich that is documented in this volume and my *venia legendi* lecture at the University of Tartu in 2006. I'd like to thank the audiences of these presentations for valuable comments. Special thanks go to Marcus Rossberg with whom I carried out the research on this topic, and to Alan Baker for very valuable comments on an earlier draft. This paper was written with the support of grant ETF 7163 of the Estonian Science Foundation.

in nominalist programs in the philosophy of mathematics. His work on similarity relations, quality classes, and phenomenalism is inspiring and intriguing for anyone working in the cognitive sciences and interested in the ways our mind structures appearances. On the other hand, his work on the languages of art and his so-called cognitive turn in aesthetics, as well as his infamous "New Riddle of Induction" have never ceased to be of central interest in their areas, the philosophy of art and the philosophy of science, respectively.

However, the timeliness of Goodman's work will for now not be the focus of this paper. What I am going to concentrate on is a topic usually completely neglected when studying Goodman - it is the unity of Goodman's thought. How are his contributions connected with each other?² Is it just an idiosyncratic coincidence of interests or is there something more behind it? A philosopher specialized in logic is typically also interested in philosophy of language or the philosophy of science but very seldom is a logician in addition interested in the philosophy of art and almost never in all these areas at the same time. Even if it was not for historical curiosity on our side to find out whether or not there is a common basis in Goodman's interests and proposed solutions, being ourselves working in certain systematic sub-disciplines should make us curious. Maybe Goodman hit on a connection between areas we, so far, have ignored. Maybe it would for our own systematic endeavours be helpful to see beyond our own noses, from time to time, the way Goodman constantly did.

This enterprise, to find unity in Goodman's thought, might be doomed from the start. In what I believe to be Goodman's last publication he writes:

There is no such thing as the philosophy of Nelson Goodman any more than there is such a thing as the finger of Nelson Goodman. There are many philosophies, but on the other hand there is no nice neat order of different complete philosophies: there are lots of ideas, conjectures about various fields. A few months ago, at the Technische Universität in Berlin, [...] I gave an impromptu talk called "Untangling Nelson"

² This question we answer in far more detail in (Cohnitz and Rossberg 2006).

Goodman" and I said, 'Well, here's all this mess and can I do anything about untangling these things?'. The answer was that I couldn't do very much.

I mean, for instance, I had dealt with certain topics many different times and in many different contexts; but it is not always clear how these relate to one another. All I could do is suggest some of the different attacks that I made on some of the problems at different times and at least note that these were not all part of a well organized scheme. They were all different attempts to deal with different aspects of the problem. And then it occurred to me that untangling this mess might entail a good deal of loss, the kind of loss you get if you try to untangle a plate of spaghetti: you would end up with some rather uninspiring strings of dough which would not have anything of the central quality of the whole meal. (Goodman 1997, 16-17)

So, is there really a unity in Goodman's work? Despite Goodman's pessimism, I hope to be able to point out the coherence and unity that Goodman denies in the quote just given.

Perhaps it is possible to "untangle" Goodman a bit, or at least provide a starting point for further studies of his philosophy. Of course I cannot deal with all and everything – especially not in view of the space constraints. I will limit my project here to highlighting two central topics that could be followed through all his work, although I won't have the space then to follow them. The two main topics I will suggest should – I hope – be self-explanatory. I've chosen these two, since these are the points most often misrepresented by historians of post-war analytic philosophy and even by prominent Goodman specialists.

2. On Foundations

If one is looking for commonalities it is often advisable to start historically and look for common roots. If we start this way with Goodman we should start with his major methodological work, his PhD thesis *A Study of Qualities*, defended in 1941, which was published in revised form as *The Structure of Appearance* ten years later, in 1951. Indeed, or so I will argue, this work is the key to the unity of Goodman's thought. However *A Study*

of Qualities is also the most complicated book Goodman ever wrote and few people have studied it in any detail. If it contains the key to the unity of his philosophy it is certainly well hidden. I will thus spend some time explaining what this work is about and what its major insights were and where it came from. This is necessary also because even Goodman scholars who advocate that *The Structure of Appearance is* the key to Goodman's thought have, to my mind, failed to understand what that key really is. In particular there are two major misunderstandings concerning the motivation and origin of Goodman's *Structure of Appearance*.

- 1. Goodman's project in *The Structure of Appearance* is intended as an anti-foundationalist rival to Carnap's *Aufbau*, and thus his philosophy can best be characterized in opposition to logical positivism.
- 2. Goodman's nominalism led to the construction of the *Calculus of Individuals*, Goodman's mereological system, and its implementation in *The Structure of Appearance*, and thus his philosophy is throughout driven by nominalism.

Both these claims are common, but nevertheless wrong. The second part of each claim which generalizes to Goodman's philosophy as a whole, could of course still be true for all the rest of Goodman's philosophy, even if the first part, which is specific for the *The Structure of Appearance*, should turn out to be false. In that case, *The Structure of Appearance* would simply not contain *the* key to Goodman's philosophy. I will in the next sections argue that the *both* parts of *both* claims are false. Since I nevertheless think that *The Structure of Appearance* is the key to the unity of Goodman's thought I will have to locate it elsewhere – neither in his opposition to logical positivism nor in his nominalism.

So let us turn first to the first half of the first claim.

The received view:

Goodman's *The Structure of Appearance* was intended as an antifoundationalist reconception of Carnap's *Der logische Aufbau der Welt*.

Catherine Elgin, for example, writes:

Traditionally, phenomenalism maintains that all *a posteriori* knowledge derives from what is given in experience. If so, the goal of a phenomenalist construction is to provide the derivation. That is what Carnap attempts in the *Aufbau*. Goodman changes the subject. He believes the myth of the given cannot survive the repudiation of the scheme/content distinction. He denies that, independent of any prior systematization, some things are and other things are not really primitive. (Elgin 2001, 681)

And so does Geoffrey Hellman:

Turning to epistemology it must be stressed that, despite Goodman's indebtedness to Carnap and the positivists on constructionalism, *Structure* represents a sharp break away from the foundationalism that characterized the *Aufbau* [...]. (Hellman, *SA* (3rd ed.), XXIII)

As is well known, Carnap's *Der logische Aufbau der Welt* (Carnap 1928) and Goodman's *The Structure of Appearance* are both studies in constitution theory. Carnap investigated the example of a world built up from primitive temporal parts of the totality of experiences of a subject (the so-called "elementary experiences" or just "erlebs") and thus faced the *problem of abstraction*: how can qualities, properties and their objects in the world be abstracted from the phenomenal experiences of ours. Goodman on the other hand investigated in his thesis the example of a system built on phenomenal qualities, so-called qualia (phenomenal colors, phenomenal sounds, etc.) and faced the *problem of concretion*: how can concrete experiences be built up from abstract particulars. Since Carnap's system is – as we have said – built on phenomenal experience, it might be conjectured that it is thus an exercise in epistemological foundationalism. Was that really Carnap's intention?

Thanks to the efforts of Friedman (1987), Richardson (1998), Pincock (2002) and others, many are nowadays convinced that phenomenalistic foundationalism was not a major (if any) concern for Rudolf Carnap and that therefore the project of *Structure of Appearance* does not differ with

respect to foundationalism from the *Aufbau*. Thus we should not interpret the *Aufbau* the way Elgin did in the quote, which is considered an instance of the "received view".

Surprisingly, this "received" interpretation of the *Aufbau* is usually seen as having emerged from Quine's and Goodman's interpretations. Pincock, for example, writes:

In "Two Dogmas of Empiricism" Quine claims that Carnap's project in *Der logische Aufbau der Welt* is empiricist and reductionist [...] In a similar way, Nelson Goodman has claimed that the *Aufbau* is phenomenalist in nature [...] Quine and Goodman see in Carnap's many references to Russell a sign that he is continuing the traditional project of British empiricism. (Pincock 2002, 1-2)

Did Goodman misunderstand Carnap? If that were true, Goodman's interpretation of the *Aufbau* would be wrong, and the characterization of his philosophy as a program directed against Carnap's logical positivism almost tragic. A closer look at Goodman's reading of Carnap reveals, however, that Goodman considered Carnap's project to be in the same antifoundationalist spirit as his own. Reading Goodman's doctoral thesis *A Study of Qualities*, from which, albeit with considerable rewriting, Goodman developed *The Structure of Appearance*, it becomes clear that Goodman was absolutely aware from the very beginning of his dealings with the *Aufbau*, that phenomenalist foundationalism was not the main theme, if indeed a theme at all, of Carnap's. Neither in *A Study of Qualities*, nor in *The Structure of Appearance* is Carnap accused of foundationalism. In fact, Goodman correctly says already in *A Study of Qualities*:

[...] Carnap has made it clear that what we take as ground elements is a matter of choice. They are not dignified as the atomic units from which others must be built; they simply constitute one possible starting point.
[...] In choosing erlebs, Carnap is plainly seeking to approximate as closely as possible what he regards the original epistemological state [...] Yet whether it does so or not is no test of the system. [...] Hence [...] argument concerning whether the elements selected are really primitive

in knowledge is extraneous to the major purpose of the system. (SQ, 96-98)

Here it is obvious that Goodman himself did not consider his constructionalism as an epistemological alternative to Carnap's. Insofar as epistemology does play a role in *The Structure of Appearance* or *A Study of Qualities*, this criticism was directed at the philosophy of C.I. Lewis, who was Goodman's teacher at Harvard. Lewis indeed held the view that empiricism must presuppose the incorrigibility and indubitability of what is given in experience. According to Lewis, I might need to revise, for example, that I saw a plane crossing the sky when I learn that what I mistook for a plane was Superman. However, nothing can make me revise that there was a blue and a red spot in the centre of my visual field that then led to the (false) belief that there was a plane.

A Study of Qualities, on the other hand, begins with the argument that even the simplest judgements of this sort – as the one about a blue and a red spot in the centre of my visual field – might be revised in the light of new evidence. My judgement that I had a blue spot in the middle of my visual field a few seconds ago when I looked at a ripe apple under normal conditions might be revised when I now judge that I have a red spot in my visual field, looking at the same object under the same conditions and know that it could not have changed its colour. However, if such revisions can be made in retrospect, nothing of the "given" is indubitable or incorrigible. Judgements about qualia, in this sense, are decrees. Which are accepted is a matter of the overall coherence of my system of beliefs and my other qualia judgements.³

The literal unverifiabilty of such quale-recognition is, nevertheless, in the last analysis beyond question. If I say the green presented by that grass now is the same as the green presented by it at a certain present moment, I cannot truly verify that statement because I cannot revive that past moment. The statement therefore constitutes an arbitrary and supreme decree. But a decree, simply because it is arbitrary, is not therefore necessarily haphazard. My quale-identifications are influenced;

³ See also Goodman 1952 and Lewis 1952.

I do not feel equally inclined to identify the color presented by the grass now with the color presented by a cherry a moment ago, though such a decree if made would be equally supreme and unchallengeable on strict grounds. We are all much in the same position of absolute but sane monarchs; our pronouncements are law, but we use our heads in making them. (SQ, 17, cf. SA (2^{nd} ed.), 134)⁴

Also in this respect Goodman was *following* Carnap and the logical empiricists. Unlike the picture that most people (and even most historians of philosophy) have of logical positivism, the given in experience as a foundation of knowledge played no special role in it, especially not in the philosophy of Carnap.

C.I. Lewis emphasises this in his 'Logical Positivism and Pragmatism' (Lewis 1941). There he explains that the main difference between the empiricism of the pragmatists and the empiricism of the logical positivists (especially the Carnap of *Philosophy and Logical Syntax* (Carnap 1935)) is that the latter were ready to analyse empirical knowledge fully in the so called "formal mode", as more or less coherent systems of accepted sentences, some of which are "protocols", some are sentences of mathematics and logic, some are generalisations, etc. The content of such knowledge would be explicated only in terms of deductive consequences and logical relations, but not in terms of the experiences connected with certain terms and statements.

In particular, the formal mode would not distinguish between statements such as 'This object looks red.' and 'This object is red.' Instead, logical positivism would (according to Lewis' interpretation of it) recognise both statements as one and the same "observation-sentence".

For Lewis, this sort of empiricism was not worthy of the name. After all, the experiential element did not seem to show up at all in this kind of formal analysis. Lewis claims instead that a proper empiricism must treat

⁴ "When an identification causes us too much trouble, it becomes simpler to abandon it; and the sort of trouble we generally find ourselves in because of our decrees is the most serious possible trouble of thought: logical inconsistency." (SQ, 18) – "Normally, we have not a conflict of two decrees, but a conflict between a new decree and a whole background of accepted decrees. We could uphold the discordant newcomer, but only at the exorbitant prince of reconstructing our whole picture of the past." (SA (2^{nd} ed.), 135)

sentences of the form 'This looks red.' as special, indubitable statements. We might err when classifying things as *being* red, but we cannot err when it comes to recognising things as *looking* red. This is "the given" in experience, the phenomenal states we find ourselves in when making experiences. Without such an indubitable element, Lewis feared that our epistemology would necessarily collapse into a coherence theory of truth:

[E]ither there must be some ground in experience, some factuality it directly affords, which plays an indispensable part in the validation of empirical beliefs, or what determines empirical truth is merely some logical relationship of a candidate-belief with other beliefs which have been accepted. And in the latter case any reason, apart from factualities afforded by experience, why these antecedent beliefs have been accepted remains obscure. Even passing that difficulty, this second alternative would seem to be merely a revival of the coherence theory of truth, whose defects have long been patent. (Lewis 1952, 112-113)

Thus, besides the chicken and egg problem of why we should ever actually come to accept any system, we would not know how to choose between the many equally coherent systems that are all logically possible.

Goodman was ready to bite that bullet when throwing away the indubitable given. Lewis, the major advocate of pragmatism, commented on this move by Goodman that his "proposal is, I fear, a little more pragmatic than I dare to be" (Lewis 1952, 118).

Indeed, Goodman's early and later philosophy was anti-foundationalist. This is truly a characteristic of his work on induction, metaphysics, logic and even the languages of art. It should, however, not be interpreted as a counter program to logical positivism. What Goodman did – in all these areas – was to continue Carnap's program and enlarge it to cover new areas. This is obvious if we consider Goodman's relativism and irrealism. It is also apparent, when we think about his pluralism in logic and his insistence that there are more cognitively valuable representation systems than just the sciences, namely the languages of art.

His anti-foundationalism therefore was more than just a restatement that there is no bed rock for knowledge – as was also argued by Karl Popper and Otto Neurath, but also that there are no fundamental ontological

objects, that there are no fundamental logical principles, and that there are no privileged representation systems. All of these echo Rudolf Carnap's famous principles of tolerance. Tolerance with regards to ontology, to logical principles and to representation systems in general.

But wait, you might object, if anti-foundationalism in this broad sense, in epistemology, logic and ontology does best characterize the unity in his philosophy and places him in the tradition of the logical positivists, as you claim, how come that Goodman is one of the most famous nominalists? After all, nominalism is usually seen as an ontological claim and – moreover – a not very permissive one. How can anybody claim of himself that he is an ontological pluralist and at the same time be a nominalist? Here we must turn to a second misunderstanding of Goodman's philosophy.

3. On Constructions

The second misunderstanding concerns Goodman's nominalism. First, it has to be made clear, that Goodman's nominalism is not concerned with the rejection of abstracta or universals, but is precisely *the rejection of the use of classes in constructional systems*. Second, it is a common misunderstanding that the technique to actually develop constructional systems without any classes – namely Goodman's (or rather Goodman's adaptation of Leonard's) Calculus of Individuals – was designed with that purpose in mind.⁵ Goodman simply was no nominalist when he began his work on the Calculus. He was not a nominalist in any sense of the word.

3.1 The Calculus of Classes and the Calculus of Individuals

Carnap's constructional systems, as well as Russell and Whitehead's *Principia Mathematica*, included in their logical apparatus the formation of classes, classes of classes, and so forth, of whatever entities function as individuals, and it is in terms of such classes that the various non-primitive terms are defined.

Indeed, in *The Structure of Appearance* Goodman eschews the use of the class concept as "platonistic" and adheres instead to the version of

⁵ That nominalism is a mark of all of Goodman's philosophy is, for example, claimed in (Scholz 2005).

nominalism that he had at that time developed with Quine. However, the road towards this nominalism is not as straight as it might seem.

Goodman collaborated already as an undergraduate student with Henry Leonard, who was at that time a PhD student at Harvard. Henry Leonard's PhD thesis discusses issues related to Whitehead and Russell's *Principia Mathematica*. In the 'Preface' of *Singular Terms* (defended in 1930) Leonard thanks his supervisor Alfred North Whitehead and "Mr. H. N. Goodman", with whom he "discussed together nearly every point developed in this thesis" (Leonard 1930, v). Leonard summarizes the topic of this thesis as follows:

The Calculus of Classes achieved success through its disregard of the traditional abstract terms. The object of this thesis is to show that this disregard was justified, because abstract terms are singular and not general, that on the other hand, symbolic logic should and can provide a treatment of these terms in a calculus of singular terms and that with this development, it is possible to see that symbolic logic has not thrown over intension, but only its traditional association with abstract terms. (Leonard 1930, p. 1, abstract to the PhD thesis)

From these remarks alone it is difficult to see what significance *Singular Terms* might have for Goodman's work on *The Structure of Appearance*, however, I believe that Leonard's thesis was probably the initial motivation for Goodman to start the project carried out in *A Study of Qualities*, presumably long before he had even heard of Carnap's project.⁶

This becomes clear when we consider what at that time was understood to be an abstract term. "Abstract universal terms" in traditional logic were

_

⁶ Quine (as he says in his autobiography, 1985, p. 86) first heard of Carnap in 1932 from John Cooley, one of his fellow graduate students. In the same year Feigl was at Harvard and talked to Quine about the Vienna Circle. Presumably Goodman's knowledge of Carnap was not before this year either (cf. also Quine 1985, p. 122, where he describes how he and Goodman discovered that Leonards and Goodman's project had resemblance to the *Aufbau* and how Quine noted that the Calculus of Individuals was essentially Lesniewski's mereology). Scholz (2003, 17, FN 32) conjectures that Goodman might have learned about the *Aufbau* from Leonard who was in Munich in 1929. This seems unlikely though, since Leonard does not refer to Carnap's work in (Leonard 1930) although it is very closely related to his chapter V.

names of attributes (properties, such as 'redness') and relations. They were taken to be different from concrete general terms (such as 'red thing') on metaphysical grounds. Leonard's conviction that logic should not settle metaphysical disputes one way or the other led him to favour a treatment of names of attributes as names of additional individuals. *Principia Mathematica*, being primarily interested in the reconstruction of mathematics, could not provide the means for doing this:

Ideally our symbolic logic should offer us a calculus, which analyses immediately the structure of the propositions that employ abstract terms. And until it does that, our symbolic logic is incomplete. [...] The object of the present paper is to seek a solution to this problem. In general, our solution consists in holding that the Calculus of Classes is the calculus of general terms, that abstract terms are rightfully excluded from the type called "general", but that they belong to the type called "singular." Thus, instead of omitting them entirely, we add a new chapter to symbolic logic, and it is this addition which characterizes our whole position. (Leonard 1930, 7-8)

In other words, Leonard did not intend to *replace* any part of the Calculus of Classes, but to add new resources to it to deal with problems the original calculus was not designed for. Leonard introduces the calculus of singular terms, which turns out to be a mereological system. In this system, variables range over individuals that can be summed together and form new units, just as the later Calculus of Individuals would. Applications considered in Leonard's examples are volumes and qualities. The calculus deals with part-of and crossing relations, etc.⁷

In part V of his dissertation, Leonard discusses different possible interpretations of his calculus. His interesting result is that the calculus whose variables should be interpreted as ranging over parts of the world can serve just as well for a *realistic* conception of the world as for a *nominalistic* conception. In a realistic conception qualities would be treated as basic units and all concrete objects or other units defined as complexes

-

⁷ Cf. Marcus Rossberg's contribution in this volume.

built up out of these. Leonard also considers realistic systems built on phenomenal qualia rather than qualities.

All units are equally real, but in order to introduce system in our view of the world, we must take certain ones as basic and describe others in terms of these. In the suggestions which we have just outlined, we have taken quality units as basic, where under "quality units" we include units of space and time. In terms of these, we describe units of other types. On this view quality units are real parts of our world, the basic units in a world view. (Leonard 1930, 238)

Nominalistic conceptions, on the other hand, would take concrete particulars as basic and construct qualia or qualities out of these. For Leonard, just as for Carnap and Goodman, what you start with seems completely arbitrary from a logical point of view. Eventually, Leonard comes to his own principle of tolerance, claiming that for different purposes ("every day activity", "science", "art", Leonard 1930, 242-244) different systems might be adequate and that none of them can claim to be more real than any other. Logic is considered to be the study of what is common to all "unitations" [ways to build up a representation of the world from a given basis], but is neither concerned with developing a new unitation nor with singling out one such unitation as privileged.

3.2 The Platonism and Realism of A Study of Qualities

Goodman's dissertation project might in its first conception be started as a further elaboration of Leonard's dissertation. Just as *Singular Terms*, *A Study of Qualities* does not *replace* the Calculus of Classes in the construction, but *adds* the mereological system to it. This is why in *A Study of Qualities* nominalism is not an issue at all. In *A Study of Qualities*, Carnap's system is called "nominalistic", for the reason that Carnap started with erlebs (*Elementarerlebnissen*), concrete particulars. The system of *A Study of Qualities*, on the other hand, is called "realistic" because its basis is comprised of phenomenal qualia. The method of construction in both systems, however, is *platonistic*, for Goodman and Carnap both use the Calculus of Classes (although Goodman makes less use of it).

This latter point changes in *The Structure of Appearance*. Set theory, the Calculus of Classes, is completely replaced by the mereological system, the Calculus of Individuals. Now Goodman considers his system to be "nominalistic", this time with respect to the method of construction, and Carnap's system to be "platonistic". The old division, based on the different choice of bases, is now expressed as the difference between "particularism" (Carnap) and "realism" (Goodman). Both systems are, however, phenomenalistic rather than physicalistic (a basis that Carnap later was flirting with, cf. Carnap 1931).

The main impact of the Calculus of Individuals since its first implementation in *A Study of Qualities* seems to be the fact that it made it possible to circumvent a certain constructional difficulty of Carnap's *Aufbau* known as the *difficulty of imperfect community*. The problem was that Carnap's method of abstracting qualities from elementary experiences – the so-called "quasi-analysis" – results under unfavourable circumstances in certain quality classes although not all members in these classes properly share a common quality.

As Goodman and Leonard already showed in their 1940 paper 'The Calculus of Individuals and Its Uses', this problem does not arise if the resources of the Calculus of Individuals are used to construct qualities as quality wholes. It was only much later, when Goodman reworked *A Study of Qualities* into *The Structure of Appearance*, that Goodman made nominalism the prime motivation for his use of the calculus of individuals.

To summarize: Goodman's nominalism is thus no aspect of his philosophy that would unify all his work, although, of course, you will find Goodman mentioning his nominalism also in his other writings, as for example in *Languages of Art*. Nominalism is rather a symptom of another really unifying aspect of his work, which also explains how a pluralist – like Goodman – can at the same time defend such a prima facie non-pluralistic idea as nominalism.

4. On Explication

I emphasized already that Goodman continued the tradition of the logical empiricists. He did so not only with respect to their anti-foundationalism, but also in the way that he conceived of the aim and purpose of philosophy

as such. Whereas the British branch of analytic philosophy was rooted in the ordinary language philosophy of the later Wittgenstein, the American branch, founded by the Viennese emigrants, and by Hans Reichenbach, Charles Morris, Willard Van Orman Quine, Morton White, Goodman and Alfred Tarski (to name but a few), was rooted in the so called *ideal language philosophy* that dates back to Gottlob Frege (and in a broader perspective to the work of Gottfried Wilhem Leibniz).

In contrast to the ordinary language philosophers, the logical empiricists did not think that ordinary language is basically in good order and that just a better understanding of it would reveal the dissolutions to our philosophical (pseudo-)problems. To the contrary, the positivists believed ordinary language to be inexact and misleading and were engaged in constructing a better substitute. This made necessary a systematic reconstruction of discourse in an artificial ideal language, the language of formal logic.

Goodman stood in this tradition and hence in opposition to British ordinary language philosophy. One of the main differences between the two types of analytic philosophy was their attitude towards systematicity in philosophy. As is well-known, the later Wittgenstein abjured systematicity in philosophy completely. As Goodman interpreted him, Wittgenstein regarded philosophical problems as diseases spread via natural language. The philosopher is accordingly a therapist who in single cases of confusion comes to help with a cure that is specific to the case at hand. The nature of this ambulance-model of philosophy allows philosophers to stop doing philosophy whenever they please. Since they are not interested in constructing a systematic theory, to stop philosophising will not prevent them from reaching a final goal. Their aims are all temporary, to help the poor souls who find themselves trapped in a puzzle of natural language.

Goodman rejected this view. First of all, philosophical puzzles do not arise for the man in the street who just tries to make a living. Philosophical puzzles arise for philosophers and they arise only because philosophers have set up standards of understanding, which might or might not be met by a literal understanding of natural language.

[T]he philosopher's puzzlement about language is always a puzzlement about interpreting ordinary statements in a philosophical way. The

puzzlement or confusion is a function not only of the language but of our standards or sense of philosophical acceptability.

Wittgenstein triumphantly exclaims that his conception of philosophy allows him to stop doing philosophy whenever he pleases. But he can stop doing philosophy, or at least stop needing to do philosophy, only when all philosophical puzzlement and confusion are resolved. (*PP*, 43-44)

Thus philosophers cannot stop philosophising as they please; they can stop philosophising only if either all philosophical confusions are resolved by a reinterpretation of ordinary language that conforms to the standards of philosophical acceptability or if they relax their requirements enough to take language as it is. Philosophers are not therapists of ordinary people. They are the ones having the problem of understanding and will be able to stop doing philosophy no sooner than such understanding is achieved.

There is also a second major difference between Goodman's understanding of the aim of philosophy, and of one of Wittgenstein or the ordinary language philosopher. For the later Wittgenstein, there are no real philosophical problems, merely "puzzles about language". What seems to a philosophical problem inevitably must turn out to be misunderstanding of what our words mean, or resulting from a misuse of those words. Philosophy, therefore, cannot be revisionary. The correct use of the words in natural language is the standard that needs to be respected, it cannot be that a philosopher uncovers that this use is not in good order. Goodman, on the other hand, allows for surprises. In the course of doing philosophy, so-called "common sense" (what Goodman calls "the repository of ancient error") and the pre-systematic use of words can – and in interesting cases will – be declared defunct. Philosophy leads to revisions, and discovers errors in, for example, ordinary language categorisations. Goodman's philosophy is critical in that sense in a way that Wittgenstein or ordinary language philosophy is not. For Goodman there are real philosophical problems that can and need to be solved, not just verbal confusion and language puzzles.

Goodman's nominalism, as well as much of the work in *Languages of Art*, his solution of the problem of induction and projection and especially

his work of *Reconceptions in Philosophy* is unified under the umbrella of the ideal language-conception of rational reconstruction and explication.

In this conception, problematic notions that led to philosophical problems were to be replaced by new constructions in an ideal language that should not again be polluted by incomprehensible notions, as far as possible. Such replacement was called "explication"; these replacements did not conserve the meaning of the old notions.

There is a long list of notions that Goodman attempted to explicate in this way. The connection to his nominalism is that in explicating the problematic notions in a clarified language, Goodman could not accept explications in the language of set theory. A language that contained the notion of sets wasn't comprehensible to him, like a language that contained any other intensional notions. Nominalism is thus a symptom of this special approach to philosophy. It is upheld because Goodman's very own standards of clarity did not allow the notion of sets. It is, however, not upheld because the corresponding objects were supposed to be less real than others. Nominalism is not a metaphysical thesis in Goodman's work, but a constraint on acceptable explications.

We can thus find two unifying features of Goodman's work. One concerns the philosophical content of Goodman's philosophy. A thorough anti-foundationalism, developed as a radicalization of views that are rooted in logical positivism. The second feature is methodological in nature. Since philosophy is seen as an activity that aims at understanding and elucidation, it gets done by explicating problematic notions in a clarified language.

Goodman's anti-foundationalism keeps together the different fields he was working in. His view on explication, on the other hand, as the method by which philosophy gets done, keeps together his interest in philosophical tools such as logic and mereology and explains his nominalism.

References

Carnap, Rudolf (1928): Der logische Aufbau der Welt. Scheinprobleme in der Philosophie, Hamburg: Meiner 1961.

Carnap, Rudolf (1931), "Die physikalische Sprache als Universalsprache der Wissenschaft", *Erkenntnis* II (1931), 432-465.

- Carnap, Rudolf (1935), *Philosophy and Logical Syntax*, London: Kegan Paul 1935.
- Cohnitz, Daniel; Rossberg, Marcus (2006): *Nelson Goodman*, Chesham: Acumen 2006.
- Elgin, Catherine (2001): "The Legacy of Nelson Goodman", *Philosophy and Phenomenological Research* 62 (2001), 679-690.
- Friedman, Michael (1987): "Carnap's Aufbau Reconsidered", Noûs 21 (1987), 521-545.
- Goodman, Nelson (1997): "Some Reflections on my Philosophy", *Philosophia Scientiae* 2, Actes du Colloque Nelson Goodman 1997, "Manières de faire les mondes", 15-20.
- Goodman, Nelson; Leonard, Henry (1940): "The Calculus of Individuals and Its Uses", *Journal of Symbolic Logic* 5 (1940), 45-55.
- Leonard, Henry (1930): *Singular Terms*, PhD dissertation thesis, Harvard University 1930.
- Lewis, C.I. (1941): "Logical Positivism and Pragmatism", reprinted in Goheen, J.D.; Mothershead, J. L. (eds.): *Collected Papers of Clarence Irving Lewis*, Stanford: Stanford University Press 1970, 92-112.
- Lewis, C.I. (1952): "The Given Element in Empirical Knowledge", reprinted in Elgin, C.: *The Philosophy of Nelson Goodman Vol. 1: Nominalism, Constructivism, and Relativism*, New York: Garland 1997, 112-119.
- Pincock, Christopher (2002): "Russell's Influence on Carnap's Aufbau", *Synthese* 131 (2002), 1-37.
- Quine, Willard Van Orman (1985): *The Time of My Life: An Autobiography*, Cambridge, MA: MIT Press 1985.
- Richardson, Alan (1998): Carnap's Construction of the World: The Aufbau and the Emergence of Logical Empiricism, Cambridge: Cambridge University Press 1998.
- Scholz, Oliver (2005): "In Memoriam Nelson Goodman (August 7, 1906-25 November 1998)", in Steinbrenner, J.; Scholz, O.R.; Ernst, G. (eds.): *Symbole Systeme, Welten: Studien zur Philosophie Nelson Goodmans*, Heidelberg: Synchron 2005, 9-32.