

Neue Sachlichkeit, Carnap, Bauhaus

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1. Introduction

That a story could be told about the relationship between some leading members of the Vienna Circle and specially Rudolf Carnap on the one hand and modern architecture and in particular the Bauhaus on the other, could have been seen already many years ago. I refer of course to the two classical passages where Carnap and other Circle members draw parallels between their philosophy and modern architecture. One is the last paragraph of the Vienna Circle's manifesto "Scientific World Conception: the Vienna Circle" itself:

We see, how the spirit of the scientific world view penetrates in rising degree the form of personal and public life, of education, of architecture, and how it helps to build the economic and social life according to rational principles. The scientific world view serves life and life receives it.¹

The second passage is the well known paragraph from Carnap's foreword to his "Logischer Aufbau der Welt":

We too have "needs of the heart in philosophy"; but these are interested in clarity of concepts, purity of methods, responsibility of theses, achievements through cooperation, in which the individual person integrates itself...

We sense an inner community of attitude, which lies at the bottom of our philosophical work, with the spiritual attitude, which at present has consequences in very different areas of life; we sense this attitude in currents of art, especially in architecture, and in movements which try hard for an ingenious shaping of human life: of personal and public life, of education, of outer orderings of greater dimension. In all these instances we sense the same basic attitude, the same style of thinking and creating. It is the attitude, which is after clarity everywhere and nevertheless acknowledges the never wholly completely understood entanglements of life... The belief that the future belongs to that attitude is backing our

¹ Carnap et al. 1929.

work.²

But from these passages of course nothing special about any personal engagement of Vienna Circle members in general and Carnap in particular with modern architecture can be concluded. He avoided to talk about such engagements in his intellectual autobiography³ for reasons I don't know. Herbert Feigl did otherwise: in his autobiographical paper "The Vienna Circle in America" he wrote the following about his fellow Vienna Circle member Otto Neurath:

Neurath, a man of great erudition, especially in history and the social disciplines, was ... a powerful propagandist of the Viennese positivist outlook, He was of powerful physical stature, extremely energetic, full of "enterprise", with great talents for organization. He was also a very witty man, using sarcastic dialectics most effectively in discussions and controversies.⁴

And then Feigl goes on:

I owe him a special debt of gratitude for sending me (I think the first "emissary" of the viennese circle) to Bauhaus Dessau, then, in 1929, a highly progressive school of art and architecture. It was there in a weeks sojourn of lectures and discussions that I became acquainted with Kandinsky and Klee. Neurath felt that the Circle's philosophy was an expression of the *neue Sachlichkeit* which was part of the ideology of the Bauhaus. I don't know any exact synonym in english for that german word *Sachlichkeit*. Perhaps the closest would be "fact-minded, sober attitude". This was indeed the basic mood of the Vienna Circle.⁵

Now only this much was known when Peter Galison, Harvard historian of science, published his article "Aufbau-Bauhaus. Logical Positivism and architectural modernism", in 1990⁶ which was later on translated into German and since then reprinted several times. Galison was the first to present on the basis of largely unpublished sources (as for instance the Carnap Papers) an overview of the field and an interpretation in the context of the – then – still virulent modernism-postmodernism debate as well.

With the following remarks I will try to

² Carnap 1928, foreword.

³ Carnap 1963.

⁴ Feigl 19??

⁵ Emphasis in the original.

⁶ Galison 1990.

- 1) complete Galison's account of the Vienna Circle/Bauhaus story in various directions and especially answer the question, when and why it started and ended,
- 2) go into the prehistory of that story and especially the till now unknown theme of the Vienna Circle's relation to the movement of *Neue Sachlichkeit*, touched upon in Feigl's remarks quoted above, and
- 3) try a different interpretation of the similarities to be found in Bauhaus ideology of architecture of the late 20ties and the Vienna Circle's philosophy of the same period, seen both from the angle of *Neue Sachlichkeit*.

2. Vienna Circle and Bauhaus

It is true: Vienna Circle members were already in contact with the Bauhaus before their lectures in Dessau began. It is of course sheer coincidence that the "Volkshochschule" (people's university) of Jena (in which Carnap served as a teacher of mathematics for some semesters) and the Bauhaus in nearby Weimar were founded on the very same day, the 1st of April 1919. But later on there developed a certain amount of cooperation between these two institutions and their leading members. Walther Gropius, founder of the Bauhaus, gave on various occasions lectures at the Volkshochschule. I don't know whether Carnap attended them or had moved to Buchenbach near Freiburg already. Otto Neurath was in any case – in his capacity as the director of the newly established "Gesellschafts- und Wirtschaftsmuseum" (social and economic museum) in Vienna invited to attend the inaugural ceremonies of the new Bauhaus building in Dessau in December 1926, and he reported afterwards on that event.

But it lasted till spring 1929 when the relations were intensified. My list of all the lectures given by Vienna Circle (and of the corresponding Berlin group around Reichenbach) members is the following:

27.5.1929 **Otto Neurath:**

Pictorial Statistics and Present Time ("Bildstatistik und Gegenwart")

3.-8.7. **Herbert Feigl:**

3.7. The Scientific World-Conception ("Die wissenschaftliche Weltauffassung")

4.7. Physical Theories and Reality ("Physikalische Theorien und Wirklichkeit")

5.7. Natural Law and Freedom of Will ("Naturgesetz und Willensfreiheit")

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| 6.7. | Chance and Law (“Zufall und Gesetz”) |
| 7.7. | Body and Mind (“Leib und Seele”) |
| 8.7. | Space and Time (“Raum und Zeit”) |
| 15.-19.10. | Rudolf Carnap: |
| 15.10. | Science and Life (“Wissenschaft und Leben”) |
| 16.10. | Task and Content of Science (“Aufgabe und Gehalt der Wissenschaft”) |
| 17.10. | The Logical Construction of the World (“Der logische Aufbau der Welt”) |
| 18.10. | The fourdimensional World of Modern Physics (“Die vierdimensionale Welt der modernen Physik”) |
| 19.10. | The Misuse of Language (“Der Mißbrauch der Sprache”) |
| 26.11. | Walter Dubislav: |
| | Main Theses of Kantian Criticism (“Hauptthesen des kantischen Kritizismus”) |
| 9.6. 1930 | Otto Neurath: |
| | History and Economy. Two Lectures (“Geschichte und Wirtschaft. Zwei Vorträge”) |

To this list perhaps two lectures by Erwin Finlay-Freundlich, director of the Potsdam-based astronomical institute and – with the aid of the famous modern architect Peter Mendelsson – builder of the well-known Einstein-tower there must be added, because Finlay-Freundlich belonged as well to Reichenbachs Berlin group. And then there is a series of three lectures delivered by Philipp Frank in 1931. One lecture, which Galison attributes to Hans Reichenbach⁷, was planned, but actually not delivered. The interesting thing now is that apart from these additions (and the deletion) the lectures of logical empiricists cover only a very small span of time, namely the year from May 1929 to June 1930. And the bulk of these lectures, namely those given by Feigl and Carnap, were given at the end of the summer-semester 1929 and the start of the winter-semester 1929/1930 at Dessau.

So how and why started these lectures and how and why did they come to that quick end only a

⁷ Galison 1990; as the correspondence between Carnap and Reichenbach shows, Reichenbach was not present in Dessau at the time, but instead met Carnap at a Berlin train-station after Carnaps lecture-series at Dessau.

year later? About the start there are no direct sources: the correspondence between Neurath and the then acting director of the Bauhaus, Hannes Meyer, did not survive. But the causes for the beginning can be concluded from circumstances. On the one hand Hannes Meyer, since the first of April 1927 head of the newly founded architecture department of the Bauhaus and then exactly a year later director of the whole institution as successor to Walther Gropius, wanted to transform the school of design from a collection of individualistic artists into a team of constructors fulfilling urgent public needs. To this new conception belonged also his idea of basing architecture on scientific principles (“Verwissenschaftlichung des Bauens”). This would include knowledge of more physical and economical foundations of architecture. Also some biological, demographical, psychological and sociological facts up to then not included in architects curricula should be included in order to determine the quantity and quality of future housing programs. And last and not least – and that’s what distinguishes Meyers approach from that of other avantgardistic architects like Walter Gropius, Hans Schmidt or Mart Stam, who also subscribed to the idea of “Verwissenschaftlichung des Bauens” – some more general philosophical ideas, namely those of a genuine scientific philosophy, should be taught to the students. Since chances for the appointment of new teachers were slim in view of the rising economical crisis of the time, Meyers plan consisted in inviting a number of suitable guest-lecturers.

On the other hand, just about the same time some of the leading Vienna Circle members had plans about entering of what later on was termed the circles “public phase”. It is well known that in November 1928 the “Verein Ernst Mach” was founded, the society for popularization of the Scientific World-Conception to a broader public.⁸ But what is not so well known, is that two Circle-members, namely Neurath (of course) and Philipp Frank’s brother Josef Frank, a leading Vienna modern architect of international reputation⁹ and also a member of the Vienna Circle¹⁰, were instrumental in the revival of the Austrian Werkbund, a society of architects, engineers, designers in the summer of 1928. They took over leading positions in the board of the organization just a week before the “Verein Ernst Mach” was founded. Neurath’s and Frank’s policy in the Werkbund consisted among other things in building more bridges to the international scene of modern architecture, especially to Germany and especially to Meyers Bauhaus in Dessau. So Meyer was invited by the Austrian Werkbund to Vienna and gave there

⁸ Stadler 1997.

⁹ See Welzig 1998.

¹⁰ See the list of Vienna Circle members in Carnap et al. 1929.

his talk “Architecture and Education” on fourth of April 1929.¹¹ And only a month later Neurath came to Dessau in return and introduced there his Vienna method of pictorial statistics. And thats how it started.

The whole thing came to an abrupt end, because Meyer was thrown out of the Bauhaus by the town mayor of Dessau (the town financed the institution) because of alleged communist tendencies. When Mies van der Rohe replaced Meyer quickly afterwards, none of the Vienna Circle people were invited again to teach at the Bauhaus (with the single exception of Philipp Frank cited above). Van der Rohe replaced the Viennese team mainly by representatives from the Leipzig school of psychology like Felix Krüger and Karlfried Graf Dürckheim and also Hans Freyer (by the way a good friend of Carnap since their common student years in Jena¹²). This shift of staff is telling, because Meyer’s more pluralistic approach in selecting teaching staff from outwards the Bauhaus was replaced by a sharp swing to the right. I seems that Helmuth Plessner, seemingly van der Rohes favourite philosopher at that time¹³, formed the single exception to that rule.

Now I told this story about begin and end of logical empiricists activities at the Bauhaus in some detail in order to avoid exaggerations. About 20 lectures in one year is more than nothing, but not *very* much. So what happened between the beginning and the end?

First a look on sources: of Neurath’s, Feigl’s, Dubislav’s and also Philipp Frank’s lectures we have no surviving manuscripts, in Neurath’s case, because only a small portion of his papers of that period survived and from Dubislav and Frank there are no papers left at all. Feigl’s case could have been different, since his papers are now included in the Pittsburgh collection of scientific philosophy. But his invitation to Dessau arrived only a few days before he had to start his lectures. So he was not able to write new manuscripts for the occasion, but instead leaned on notes he had prepared for his many Vienna Volkshochschul-classes¹⁴, which he seemingly did not care to preserve. But he wrote a very long letter afterwards to Schlick in which he described his lectures, discussions and experiences in Dessau. I will cite some lines of this letter later on, when I try to bring together more systematically the parallels in the work of the modern architects of the Bauhaus and of the Vienna Circle-members.

11 Meyer 1929.

12 Carnap was invited by Freyer to Leipzig to give a number of lectures there in the late 20ties. It seems that their friendship survived Freyer’s right-wing inclinations, which came apparent in his “Revolution von rechts”, published in 1931. There is no correspondence with Freyer in the Carnap-papers!

13 See Dahms 2002.

14 See the list in Stadler 1998.

3. Carnap's Lectures at the Bauhaus

By far the best sources we have about Carnap's lectures. All of them are in his shorthand among his papers. Even some notes about the discussions and his meetings and experiences in Dessau can be found in his diaries. Because these things are so well documented, I shall say some words about these lectures and the subsequent discussions and reactions. What was important for Carnap and for the Bauhaus as well, can in my opinion grouped under four headings:

- 1) space,
- 2) color,
- 3) science and life (with which he began)
- 4) task of philosophy (with which he ended).

Whereas I can make here only very short remarks on the two former themes, I will have to say more on the two latter.

3.1 Space

It seems that ideas taken from Carnap's dissertation "Der Raum" (especially his insistence on the multiplicity of different conceptions of space (like the geometrical, physical or the space of vision ("Anschauung"))) had already a certain impact on Laszlo Moholy-Nagy, before Carnap came to the Bauhaus in person. In the last chapter of his book "Von Material zu Architektur" Moholy-Nagy responded to the idea of different spaces in a perhaps typical artistic way: by listing and inventing ever more spaces including the "luftleere Raum" in order to illustrate the immense diversity of different conceptions of space.¹⁵ One has to doubt that this use of some of his ideas was in Carnap's sense. But in any case Moholy-Nagy used the reference to Carnap's work only as a sort of conceptual introduction, and then went on to write about the need to provide the inhabitant of the new architecture with a special experience of space. The experience of space was according to him something biologically given to every human being and as such on a par with other experiences of the senses like those of colour or sound and could like these be developed by the study of suitable examples and practice. But in contrast to the capacities of looking and hearing the experience of space requires no special organ of its own but leans on a combination of the other senses.¹⁶ It would be interesting to compare Moholy-Nagy remarks with

¹⁵ See the nice list of those spaces in Moholy-Nagy 1929, 194 and his reference to Carnap there.

¹⁶ ???.

the corresponding paragraphs in Carnap's "Logischer Aufbau der Welt".

Now Moholy-Nagy had left the Bauhaus when Meyer was appointed to its directorship and had established himself as a photographer and stage designer in Berlin. He was himself not able to follow Carnap's lectures, but sent his wife Lucia to listen to them and to report results to him. It would be interesting to know whether Carnap's ideas had an impact on Moholy's artistic work afterwards. In any case it is noteworthy that Carnap later on lectured from 1937 onwards for a short time in Moholy-Nagy's "New Bauhaus" in Chicago.¹⁷

2.2 Color

One has to note from the start that many of the eminent painters of the Bauhaus like Kandinsky, Klee or Itten (who had left in 1923 to be replaced by Moholy -Nagy) had a special theory of color of their own. These theories answered questions like: which color corresponds to what geometrical form? For instance: does blue or red correspond to a circle? Some of these theories answered psychological questions as well like: which color arouses which emotions? It seems that the Bauhaus-members had tried to decide conflicts about the answers to these questions either by free association using examples from daily life (like the red ball of the sun, accompanied by a glass of red wine in the evening as proofs of the redness of the circle) or even by voting.¹⁸ In contrast to that Carnap favored empirical psychological research and termed every other approach as metaphysical.¹⁹ It could be interesting to follow in his unpublished papers up to his contributions to the Vienna Circle's famous "Protokollsatz"-debate his use of examples and arguments from his Bauhaus-days.

Now "space" and "color" are topics which surrounded Carnap's stay at the Bauhaus, but not themes of his speeches there. Let me now come to his first and his last formal lecture at Dessau!

2.3 Science and Life

In his first lecture Carnap confronted his audience with the following alternative:

Either science is the guide to life, insofar as it delivers goals and values for life, or that it has no function for life at all and is even inimical to life.²⁰

¹⁷ Findeli.

¹⁸ DÜCHTING 1996.

¹⁹ Galison 1990.

²⁰ ???

As to be expected in such a dialectical situation Carnap choose a middle way: science can be an aid to life in so far as it can help to find the appropriate means for some fixed goal or determine the logical relation between different goals, but that aims themselves have to be chosen without the hope for scientific guidance. As one example for the mutual exclusion of aims, by the way, he chooses the aim of letting private ownership of means of production intact and the aim to guarantee freedom from exploitation and free possibilities of individual growth. Then science can teach (according to Carnap) that these aims are mutually exclusive.

Carnap did not care to answer the question whether perhaps scientific philosophy (if not science itself) was able to name aims for life. And so his presentation seems to echo only the familiar standpoint of Max Weber in the “Werturteilsstreit” presented for instance in his famous lecture “Wissenschaft als Beruf”.²¹ The only difference between Carnap and Weber would then consist in the hopes about the possible teachings of economics vis a vis the choice of capitalism or socialism. But it seems as well that Carnap’s stance towards questions of “life” and of ethics were at the end of the 20ties influenced by Wittgenstein’s mysticism in the concluding paragraphs of the *Tractatus*.²² I cannot discuss the compatibility of Carnap’s, Weber’s and Wittgenstein’s standpoints here.

2.4 Task of philosophy

In his last lecture “Der Mißbrauch der Sprache” Carnap outlined the task of philosophy to his audience. This lecture is to my knowledge the first nucleus of what later on became Carnap’s famous article “Die Überwindung der Metaphysik durch logische Analyse der Sprache”. One main difference is that examples of contemporary metaphysical “nonsense” like Heidegger’s famous dictum “Das Nichts nichtet” are still missing. That seemed to have popped up in the discussion afterwards only.

I spare you details of the lecture. It displays in any case not only a critical attitude towards metaphysics, as the published article does. Instead it promotes a positive role for a logical empiricist critique of metaphysics. This come the foreground very clearly in the last passages of his talk:

What is the sense of Metaphysics? (and its more primitive forerunners theology and mythology). We said that they have no theoretical sense, no descriptive function. But it must

21 ???

22 ???

have a sense of another sort, because otherwise not so many and extraordinary people would have cared about it.

The sense is: expression of a life-feeling (“*Lebensgefühl*”) of a certain overall attitude towards men and world (in distinction to feelings momentarily present).

The proper means for (the expression of) life feelings (and instantaneous feelings as well) are:

1) subconscious: the expression of the face (physiognomics, mimetics etc.), the expression and movement of the body: the handwriting; the practical behaviour towards fellow human beings.

2) conscious expressions: art (expecially poetry and music; the design of the things of life).

When Carnap attacked later on some portions of Heidegger’s philosophy as word-music, this was often understood as an attack on music and art on the whole as well.²³ But the Bauhaus-lecture states it clearer than the “*Überwindung der Metaphysik*”-article: Carnap has nothing to say against music or art as such. On the contrary: they are in his view the proper conscious expressions of life-feelings and perfectly legitimate. Carnap’s critique was directed against efforts to express life-feelings in spheres where they not belonged: in philosophy, because that had to be done scientifically.

As Franz Roh, an old friend of Carnap’s from his student years in Jena put it in a letter from august 1935 to another friend, Wilhelm Flitner, who still adhered to the Dilthey/Nohl- tradition of *Lebensphilosophie*:

When you (i.e. Flitner and Carnap) meet again you should try to see the deep human insight of this exact purism of real science. The poor *mixtum compositum* philosophy bursts apart at last and these misled basic energies of the human get free for art, action and love. But knowledge attains at last security in place of strolling around in the struggle of philosophical “systems” for hundreds of years. Don’t evade furthermore the greatest achievement of thought in our time.²⁴

4 Neue Sachlichkeit and Vienna Circle

The letter I quoted from was written in 1935. Ten years earlier the term “*Neue Sachlichkeit*” had

²³ Lila Eule.

²⁴ Roh to Flitner, 1935.

gained a very wide reputation in Germany and other parts of middle Europe like Austria and Czechoslovakia as well. We heard already that Feigl took even logical positivism as a philosophical expression of this much more general cultural tendency. I think that Feigl is right, but it has to be seen what exactly were these ties and parallels between the *neusachlich* spirit in art and architecture on the one hand and in philosophy on the other. I begin with a look to the personal connections and then trace some more systematical aspects.

4.1 Franz Roh and *Neue Sachlichkeit*

“Neue Sachlichkeit” was the title of an art-exhibition in the Summer 1925 in the Mannheim art-hall.²⁵ The painters invited to that exhibition had in common that

- 1) their work remained figurative and so avoided the abstract (like Kandinsky or Malewitsch),
- 2) their figurative paintings avoided exaggerated emotions like in the period of expressionism, but aimed instead at a new soberness.

The exhibition was a great success. It moved to other cities like Dresden, Chemnitz, Halle, Erfurt and at last Dessau, all mainly in the middle of Germany. No city in Austria was reached by it, where nevertheless the movement of *Neue Sachlichkeit* gained a number of adherents among active painters.

Now this all is pretty well known. What is new, is the role of Franz Roh²⁶, a close friend of Carnap from their common student years till the former's death in 1965. Roh was the most important collaborator of Hartlaub in the preparation of the Mannheim exhibition and also the most important theoretician of *Neue Sachlichkeit*, although he avoided in the beginning the use of that word and preferred the broader term “Nach-Expressionismus” (post-expressionism). It is he who personifies the missing link between the movement of *Neue Sachlichkeit* and the Vienna Circle via Carnap and also Neurath.²⁷

Franz Roh, born in 1892 in Apolda near Weimar, had studied philosophy and art history in Jena before the first world war, where he met Carnap and where both joined the left-liberal Freistudentenschaft and the Sera-Circle. Their contacts continued during the war and afterwards, when Carnap took up his studies in Jena again and finished them with his dissertation “Der Raum” with Bruno Bauch, whereas Roh decided to complete his studies with a dissertation in art

²⁵ See Buderer/Fath 1994 with some interesting contributions about the historical exhibition and the fate of its paintings and their painters under Nazi-rule.

²⁶ The newest biographical material about Roh is contained in Mück et al. (2000).

²⁷ Roh asked Carnap after the Second World War to testify that he had hidden Neurath when he was searched by the police after his participation in the short-lived and failed soviet governments in Bavaria.

history (about dutch painters of the Rembrandt period) with Heinrich Wölfflin in Munich.

Now what exactly had Roh to do with *Neue Sachlichkeit*? He had already organized a small exhibition of *neusachliche* painters like Kanoldt, Mense and Schrimpf in Munich in 1924, when he came into contact with Hartlaub, the director of the Mannheim Kunsthalle. Roh delivered to Hartlaub a list of all the painters to be considered and also introduced Hartlaub to a number of them personally. From this list Hartlaub took away all the non-Germans and put more weight on the veristic leftist painters like Dix, Grosz and Scholz, whose paintings Hartlaub already bought and shown in his Kunsthalle.

Now in addition to helping in the preparation of the exhibition Roh undertook a theoretical effort as well: under the title “Nach-Expresisonismus” he wrote what can be regarded perhaps as the bible of *Neue Sachlichkeit*. To be true, he decidedly avoided the use of the term in order to include abstract artists as Kandinsky and surrealists like Max Ernst as well. But his characterization of the main groups of *Neue Sachlichkeit*, the leftists verists and the more rightist magical realists, is far more detailed than anything Hartlaub ever wrote.

What is more important in our present context: his book contains a chapter “Umstellung auf anderen Gebieten” (transformation in other areas) where *neusachlich* tendencies in architecture, literature, music up to science (including physics) are given. There is also a short passage about philosophy there, couched in the form of an assessment of the drawbacks and merits of the 19th century. Roh tells us there, that “the old ones” fought a fight against the rationalism of the 19th century and “the young ones” (like himself and his friends) were in consonance with exactly the rationalism and the technicism of that age. They instead condemned its romanticism, sentimentality, its irrationalism and the “Lebensphilosophie”.²⁸

4.2 Systematical Parallels

Now all this stays at a more personal level. But what are the systematic similarities, parallels and overlaps between the general program of *Neue Sachlichkeit* and their specific expressions in fields like architecture and philosophy?

A short reflection about how *not* to do this in perhaps in order. In discussing the relation between Wittgenstein’s philosophy and his famous house in Viennas Kundmannngasse some authors made the mistake to compare the relevant entities element-wise, so to speak, as if one could say: this brick there in Wittgensteins house is what corresponds to this or that elementary proposition in

²⁸ Roh 1925, 115.

his *Tractatus*. I will not discuss these approaches here. In any case the common elements in the movement of *Neue Sachlichkeit* and in Logical Empiricism must be much more abstract, because that whole movement included not only in program, but also in reality so many different domains from architecture to painting, from music to philosophy. That is a rather different task.

But the crux is in the first place that there are so very many programs of expressionism, dadaism, surrealism etc., but apart from Hartlaub's letter of invitation to the artists for his exhibition and Roh's book and perhaps some short articles by people like Hannes Meyer hardly any programmatic manifestos of *Neue Sachlichkeit*, owing to the fact that they were not a group in a sociological sense but only a collection brought together from onlookers.

Having said this as a precaution I will give in what follows a list of principles common to the adherents of *Neue Sachlichkeit*. In order to be short I will indicate only the correlates and specifications to be found in the Vienna Circle and its philosophy. My list can be seen as a completion and systematization of ideas that Feigl noted already in 1929 in a long letter to Schlick after his lectures at the Bauhaus:

The first evening I spoke about the new scientific world-conception. There was a heated discussion afterwards. The folks are in part very much of artists there, and so were defending metaphysics. But in the many discussions the days and the evenings that followed I succeeded in the end to bring those people who are in great part very intelligent and at least very much interested to better insight. That was foreseeable from the start because the new spirit of architecture is, as Carnap underlined so often, *very similar to that of the new philosophy*: the fight against superfluous entities, against sentimental-kitschy ornaments, the rationality, *Sachlichkeit* (objectivity, austerity), functionality of the new architecture is outspoken positivistic... And one tends to overcome the artists individualism in favor of collective work on the social useful as far as possible. And in the same way that among us everyone is a specialist in a scientific subject, every architect there has to know a special craft.²⁹

Now I distinguish between a programmatic kernel of *Neue Sachlichkeit* containing two essential elements, and a number of corollaries. The kernel contains two elements, a positive and a negative one. The negative element can be summed up in Adolf Loos' famous dictum "Ornament is Crime", by which he tried – already before the first world war – to free architecture (but not

²⁹ Feigl to Schlick, 21.7.1929, my emphasis.

architecture alone) from everything superfluous and in this sense “unecomonical”. I cannot discuss Loos’ understanding of the term “ornament” here and have to leave out the question, whether he himself used certain ornaments, even in *his* sense of the word.

But what is superfluous, and what not, has to be determined by a positive principle as well. And that is the commandment “form follows function”, issued by Arthur Sullivan, the american architect, in the first years of the last century as well. Antiornamentalism and functionalism are correlative to one another: artifacts that are purely functional carry no ornaments. Ornament remains if you substract from a thing its function.

The other ingredients, the correlates are the following:

- 1) modernism (instead of traditionalism)
- 2) internationalism (instead of nationalism)
- 3) collectivism (instead of individualism)
- 4) scientism (instead of irrationalism)
- 5) technicism (instead of scepticism toward technology).

My first thesis now is that all adherents of *Neue Sachlichkeit* had these principles in common. And my second thesis is, that the Vienna Circle was the philosophical arm of *Neue Sachlichkeit* and so adhered as well to these principles, albeit with certain specifications. I will comment with the following remarks only on the “kernel” and first two of these corrolaries.

The kernel

What now corresponds to the theoretical kernel of *Neue Sachlichkeit* in the Vienna Circle? The answer seems obvious: it is its antimetaphysics on the one hand and its functional view of knowledge, science and theory on the other. It is characteristic that Carnap used – as we have seen in his last bauhaus-lecture – in the campaign against metaphysics a functional argument. He asked: what is the sense, the function of metaphysics? And he answered: it cannot have a descpritive theoretical function, because this function is already occupied by science. It could have an expressive function, insofar as it expressed perhaps certain life-feelings. But that purpose is served already by art and music. Therefore metaphysics has no function at all. It is senseless, so to speak a superfluous ornament on the edifice of philosophy.

The positive aspect of the cernel of *Neue Sachlichkeit*, functionalism, is represented in the Vienna Circles philosophy by a functionalistic view of knowledge and theory. In the beginning 30ties Otto Neurath, Philipp Frank and also Carnap call scientific theories instruments or tools and

answer the question: what is the specific purpose of these sort of tools? And their answer is uniformly: the function of these tools is prediction. Hans Reichenbach later on called the logical empiricists approach to science the “functional view”.

Modernism

Franz Roh, the leading master-mind of *Neue Sachlichkeit*, had tried in vain to deliver a thesis on the aims and methods of contemporary art history and criticism as his habilitation-project at the university of Munich in 1923. But some of his ideas can be found in the introduction of his “Nach-Expressionismus”. There he writes:

There are special problems common to all historical treatments of present day problems: one is used to welcome the historian of the present (that is: the youngest past) on the part of his discipline at last with an unjustified mistrust: conditions as near as these could be approached only subjectively.

And he admits that in the case of contemporary history “main and side-lines” are more difficult to disentangle from the jumble of the whole. But on the other hand one has in the case of contemporary history at least “the full picture” at hand, whereas in older history the loss of documents handed down for instance from the middle ages is enormous and it is difficult to put oneself into the position and the spirit of times which long ago vanished. And then Roh adds:

This should be hold against a view according to which it is easier to possess the spiritual dimension (“Geistesraum”) of 1200 till 1225 and to describe it better than that of 1900 till 1925.

Now of course the task of philosophy is in the eyes of Carnap and the Vienna Circle not something directly comparable to contemporary art history, say something like contemporary history of philosophy. But the task of philosophy is an analysis and evaluation of *contemporary* science and especially physics and mathematics. And thus philosophy has no special interest in the history of philosophy as such, but only to its newest and most actual developments. So the modernism and antitraditionalism of *Neue Sachlichkeit* and logical empiricism are very similar.

Internationalism

That philosophy has to be internationalistic is perhaps a common-place now, but one has to remember that the situation was much different in Germany then. It was just Carnap’s doctoral

adviser Bruno Bauch, who was the leading figure in founding of the Deutsche Philosophische Gesellschaft during the First World War. That society insisted on the superiority of German philosophy to every other contemporary nations one and envisaged the essence of the German in philosophy in the idealistic tradition from Kant and Fichte to Hegel. The nationalistic spirit in German philosophy had also a political side to it: Bauch and most other members of his society had strong chauvinistic and also antisemitic inclinations and so paved the way for the later outspoken nationalsocialist philosophers.

In marked contrast to such tendencies Carnap and with him the Vienna Circle stucked to the internationalistic mood of philosophy, cultivated and broadened international contacts and began even with an international division of labour in philosophy. It is not by sheer chance that they began in 1935 their annual “International Congresses of Unified Science” and from 1938 the publication of the “International Encyclopedia of Unified Science”.

One of the facets of logical empiricist’s philosophical internationalism is the enthusiasm for international artificial languages like Esperanto, Ido, Latino sine flexione, Volapük etc. Carnap and Neurath were especially attracted by these efforts. And the logical empiricist’s interest in artificial languages of logic is also in part prompted by their internationalistic outlook. One has to remember that at the very first Internatioanl Congress of Philosophy held in Paris during the world exhibition of 1900 a special committee was formed under the presidentship of the french logician Couturat in order to develop an international artifical language for philosophy, be it as a special annex to one of the already existing artificial languages like esperanto or be it als a new product altogether. And the artifical logical languages can be seen as such appendices to a future internationalist scientific language the logical empiricits where after.

But of course there is sometimes a difference between internationalism proclaimed and internationalism practiced, and sometimes the label “internationalism” serves only as a pretext for nationalistic and even imperialistic purposes – be it in culture or in politics. And in our context it is telling that the “International Encyclopedia of Unified Science” is only more or less a blend of Austrian logical empiricism imported to the USA and native American pragmatism, which leaves aside most other countries contributions to scientific philosophy.

That much must suffice at the moment to show that the relation of Carnap and the Vienna Circle on the one hand and the culture of the 20ties and early 30ties in Middle Europe on the other merit a much closer study than has been devoted to it up to now.

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