

Figure 1: Transcriptions of Rhythms.
Source: Moisej Ginzburg, *Ritm v arhitekture*, 1923.

Form, Style, History, Autonomy

Ritm v arhitecture

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Ritm v arhitecture (Rhythm in Architecture) was published in 1923 as the first book by the then thirty-one year old Moisej Jakovlevic Ginzburg (1892-1946).¹ Completed in 1922, this text has often been overlooked and underestimated in relation to Ginzburg's involvement in the Moscow debate that immediately followed the Revolution.² In fact, within the prospective of a complete re-founding of the discipline of architecture in the Soviet Union in those years, the parallel activities of Ginzburg in the Russian capital appear more significantly central: in 1923 he was a member of the editing staff for the periodical *Arhitektura*, the official administrative organ of the Moskovsko Arhitekturno Obscestvo (MAO, Muscovite Association of Architects); he participated in the renowned competition for the *Dom Trudy* (Palace of Labour) in which, through the project of the Vesnin brothers, "Constructivism" would become an important part of the architectural world; he held a position at Vchutemas, where he taught a course in architectural composition, and at Moskovski Institut Grazdanskikh Inzenerov (MIGI, Institute of Civil Engineering in Moscow), where he taught history and architectural theory. One year later, in 1924, he published his second book, entitled *Stil' i epoha* (*Style and Epoch*), which consecrated him as one of the main scholars and theorists of Constructivism. In the same year he also became a member of the Rossijska Akademija Hudozestvenik Nauk (RAHN, State Academy of Russian Sciences).³

To this day, *Ritm v arhitecture* is considered as a sort of anomalous theoretical manifesto within the Soviet panorama of those years. In the view of Soviet as well as Western historiography, the book is seen as the author's early investigative survey, a hard-to-place study which led to the foundation of the theoretical inventory for the scholar who would become one of the founders, if not the principal theorist, of the phenomenon of Constructivism in architecture. Han-Magomedov, the great historian of the Soviet avant-garde's architecture, does not attribute any particular importance to this book, and he

positions it exclusively in the prospective of later developments in the “heroic” stages of Constructivism.⁴ Similar interpretations can be found in studies by a number of scholars who had concentrated on the fundamental (and in some ways paradigmatic) role of the activities of Ginzburg during the second half of the 1920s.⁵ These activities particularly encompassed the realisation of the renowned *Dom Sotrudnikov Narkomfina* (House for the employees of the Narkomfin), his co-direction of the periodical *Sovremennaja Arhitektura* (Contemporary Architecture) and his involvement in the debate on the typologies of urban settlements and on the de-urbanisation of the late 1920s and early 1930s. At present, the most interesting contribution to the theoretical and educational phases of Ginzburg’s own studies is in the preface by Anatole Senkevitch, Jr. to the English edition of *Stil’ i epoha*.⁶ Senkevitch placed the text in an historical context within a more ample cultural-political analysis that was not restricted to the Soviet Union. It was presented, for the first time, in light of the breadth and depth of this “transitory phase”.

This scarcity of research and systematic analyses is not to be attributed just to studies on Ginzburg specifically. As a matter of fact, very little light has been shed on Soviet architectural debate in the transitional phase between the pre-revolutionary period and that of the 1920s and 30s. Jean-Louis Cohen has highlighted that these events were rarely outlined and included within the mainstream developments of European architectural culture, from the complex evolution and contradictions that had characterised it from the last decades of the 1800s onwards.⁷

This essay’s objective is to begin to fill this critico-historical lacuna. Through the analysis of an historical document (*Ritm v arhitekture*), through the formative biography of its author (Ginzburg) and through the isolation of those of its base concepts that makes it anomalous within the milieu of these years (perception, rhythm, autonomy of architecture, style, role of history), it attempts to find a new analytical and thematic direction for comprehending this historical subject in a more exhaustive manner: the intellectual and cultural framework of Russia in the period of transition between the Czarist and Soviet epochs.

To this end, I will address two fundamental issues: on one hand, to frame the theoretical topics of the Soviet architectural avant-garde of the post-Revolution period within the wider context of the development of European architectural culture; that is, to comprehend the relations, the continuities and the fractures between the architectural thought of the Soviet avant-garde and the theory of European architecture, commencing from the last decades of the nineteenth century. On the other hand, I will try to understand the reasons and the meanings of one of the main subjects that has characterised the reflections of the Russian avant-garde: the notion of *spatiality* of form and *rhythm* in the figurative arts.

Seen through this analytical perspective, as I will demonstrate, *Ritm v arhitektura* is – together with the more celebrated *Stil' i epoha* – above all a privileged testimony to the extent of Ginzburg's cultural references. At the same time – as we will see later on – these books introduce to the field of architectural theory themes that were already present in the more extensive context of Russian aesthetics at the very beginning of the First World War, a debate that was influenced by German aesthetic discourse of the late 1800s and early 1900s. *Ritm v arhitektura* demonstrates how the great changes that affected the Russian artistic and architectural avant-gardes were profoundly rooted in the debates and experiments of European culture, starting in the last decades of the nineteenth century.

To examine the avant-garde solely from the perspective of accounting for developments in the late twenties and early thirties, as has been typically done until now, has offered a partial view upon this history at best, and has been a source of certain deficiencies in comprehending it. During the transitory phase – from the crisis of symbolism and eclecticism and the dawning of Constructivism – there is instead the delineation of a strong attempt to join the great theoretical experience of nineteenth century Germany and the sweeping political, economic and social changes brought forth by the Revolution.

A significant part of Russian culture of this period – of which Ginzburg is representative – criticised the exclusiveness of the functional component of artistic production propagated by the Constructivist and Productivist movements. It is precisely along themes of space and rhythm, the autonomy of artistic process and the discovery of the potentials of physiology and the process of perception, that these scholars constructed an alternative. The topics of spatiality and rhythmicity are simultaneously confronted by scientists, philosophers, artists, language theorists and architects as a cultural “problem”, as an epistemological shift that redefines the instruments for understanding reality and the relations that artistic and intellectual production establish with reality.

In this sense, discussion on the fundamental “contents” of these discourses (the intellectual's role in confrontations with reality, the rapport between art and reality, etc.) also profoundly touches upon political debate. As we will see in the last section of this essay, the polemics introduced within the architectural scene were an aspect of, and reflected, the larger ideological conflicts that would engage, with the intervention of Lenin himself, the highest levels of Soviet politics. The autonomy of both culture and science was here under debate to the ends of the radical reconstruction of society; or better, the freedom of culture and science towards political ends.

One aspect of Soviet culture is of greater interest to us for being concerned with the artistic object in and of itself, and with the laws that it forms in isolation

from any ideological office: *Ritm v Arhitektura* is a key example of this position.⁸ Politics, on the other hand, needed all manner of artists, architects and scientists to participate in propagandistic activities, to construct the new society and to fight every discourse on “autonomy” or on “purism” mounted by members of the artistic, social or scientific disciplines.

It is less interesting, for the moment, to consider the outcome of this debate at the end of the 1920s and to reason upon the ends of the cultural experience of the intellectual “purists”. It would rather be of more interest to reopen – entering through the back door, as it were – a discourse on the richness of the cultural context in which the Soviet avant-garde was formed and to return to the main discursive line of this discussion, through this analytical gaze, other interpretative veins and some of the many unique verses of the twentieth century experience.

Style, Rhythm and Baroque

One consequence, in part, of Ginzburg’s teaching activities at the two Moscow schools, *Ritm v arhitektura* is an attempt to transversally re-read the history of architecture through the common formal elements that, even in being modified and alternated over the course of various eras, maintained a constant presence as intelligible principles of architecture.⁹ One initially observes how Ginzburg introduces the notion of architectural style to his discussion. His historiographical analysis starts from the premise that various stylistic eras are not to be observed through the distinctive traits of their ornamentation or stylistic elements. He felt that the main tool of the historian – as well as for any observer of history – should be a sort of comparative method, which has the objective of analysing the evolution of history itself through an investigative criteria that focuses on the compositional modifications of its elements in order to better understand the transformation of the physical expression of architectural form through the organisational logic that so distinguishes it.

This formulation appears conceptually akin to Robert Vischer’s investigation of the *nature* of the history of architecture, and particularly close to research of the “genetic element” in architecture proposed by August Schmarsow – for him, “spatiality”, a concept that would constitute his analytic path throughout history.¹⁰ Ultimately, the underlying theses of Ginzburg’s research find an ally, in their attempt to construct a “history without names”, with the *Kunstgeschichtliche Grundbegriffe (Principles of Art History)* of Heinrich Wölfflin.¹¹

The history of styles, as it has been understood to this day – Ginzburg writes in the chapter entitled “The Problems of Rhythm” – is merely the history of the evolution of architectural form. The compositional methods that connect forms in perfect monuments have remained secondary in importance. Nevertheless,

also in this instance, to decipher the peculiarity of compositional rules means to fully understand style. *Contiguous to the history of architectural forms, it is also possible to have a parallel history of compositional methods*, a historiography that especially analyses the driving forces of such methods: the rhythm, in all varieties of its manifestations.¹²

Rhythm is hence the genetic element of architecture, a “chain” that links the entire evolution of its governing rules. And rhythm is here expressed as the result of an historical epoch’s “compositional method”. It is the product of the true “driving forces” of architecture. Therefore, it is less crucial to analyse architectural objects of prehistoric, archaic, or contemporary eras, because the method of analysis based on the observation of rhythm sacrifices the chronological context that usually operates in histories of art. Its objective is to read the “composition” or, better still, the compositional style, and not simply the “ornamental” style. Hence, it was less important to Ginzburg, as his numerous comparative examples demonstrate, to analyse the transformations of a classical language; his interest lay in understanding the diversity of the rules of assemblage for the elements of architectural form in different stages of the development of architecture itself.¹³

Architectural style is an autonomous world unto itself, a peculiar and solid system of rules, which explain that world and justify it entirely. To understand style means to penetrate these rules, to understand every element of form, the compositional methods that, with their help, create a vivid architectural discourse ... [Since] the same problems are continuously complicating, the methods to their solution must change, the creative elements that generate *the rules of rhythm – artistic images of architecture* – are transformed.¹⁴

Ginzburg’s themes of the autonomy and epistemological self-sufficiency of style, of architecture as composition, and of rhythm as an artistic component of architecture all contrast completely with the premises of Aleksej Gan’s *Konstruktivizm* manifesto (1922) and with the habitual interpretations of Constructivist activism and technicism. This point will be further explored later in the essay.

So what essentially is rhythm and why does it take on such vital importance in Ginzburg’s theory? Upon what are his theoretical proclamations fundamentally based? Above all, what is the specific origin of his ideas?

For Ginzburg, every form is organised according to a succession of elements. These elements can be analysed individually or through the relations that they establish among one another. Their situation in space, both individually or in groups, in effect creates a lesser or greater rhythmicity, a eu-rhythm to which we can react in judging its qualities: “The particularity of rhythm and its aesthetic values is the *systematic decomposition of elements in their temporal succession*, that is, the *regularity of these elements in movement*.”¹⁵ The more



Figure 2: Pietro da Cortona, Façade of Santa Maria della Pace, 1656-57, Rome.

Source: Heinrich Wölfflin, *Rinascimento e barocco*, Vallecchi, Firenze 1988.

regular and harmonic these elements' situation is in space, the better our impressions of their form will be. 'Every constituent element of this rhythm must occupy a determined space that is fairly extended, it must have material confines that operate on our visual perception.'¹⁶ In other words, at the basis of the necessity to determine the rhythmic characteristics of architecture –the fundamental criteria for its classification – is the quality of our perception. The apprehensibility of the laws organising the form that we observe is nothing other than the comprehension of the aesthetic meaning of an architectural structure, which will be made even clearer through the sensation it creates. On numerous occasions, Ginzburg meticulously describes perceptive processes that reveal a profound knowledge of works by Wölfflin and Ernst Mach, and belies clear descriptive affinities to the writings of these German scholars.¹⁷ For Ginzburg, to perceive is already 'undoubtedly a creative process' which is not only one of the theoretical conquests of Vischer and Fiedler, but is furthermore one of the fundamental theories of Sklovskij and of Formalism in Russian Literature.

Our imagination mainly decomposes concepts in their fundamental elements and constructs images; it stylises them instinctively, *it corrects external perceptions according to the needs of physiological structure* ... The laws of rhythm hence greatly *economise* the energy of our perception.¹⁸

Even if Ginzburg makes no explicit reference to empathetic theories, their process is a conditioning structure of the book *Ritm v arhitekture*.¹⁹ According to him, the sensations of pleasure or aversion in response to architectural

form correspond to the quality of an architecture with all of its (dis)harmonies and (dis)symmetries. However, the very use of the term “rhythm”, which is itself an effective “indication” of alternating musical forms in time, becomes a metaphor when applied to architecture as a static phenomenon, an empathetic transposition of movement onto form. With architectural elements, there is no active movement, but only a passive succession; a dynamic is manifested only within our consciousness, within our transfer of sensations to the architectural object under observation. Ginzburg concludes the book by supporting Wölfflin’s theses of the *Prolegomena zu einer Psychologie der Architektur* (1886, *Prolegomena to a Psychology of Architecture*): ‘Architecture is a living organism like any other, and by this analogy we have the habit of conferring upon it all the functions of organic life. In a certain sense, in architecture we find both a body and its members that carry out their functions.’²⁰

In summary, the aesthetic quality of architecture tightly correlates to its rhythmic characteristics, given by the disposition and the relationship of its elements in space. The rhythmic laws respond exclusively to the laws of our perception of form, with all of the empathetic elaborations that this perception provokes. Furthermore, Ginzburg maintains that we do not perceive the architectural form through its ornamental-stylistic characteristics, but it is rather through the alternation (rhythm) of the compositional elements that an architectural monument produces sensorial effects within us. In this discourse, it is interesting to note how Ginzburg, through the illustrations of architecture in his book, spells out a rudimentary but eloquent notational system, reducing his examples to simple schemes and structures. This system, which he himself defined as *stenographic*, corresponds precisely to the theoretical intention of ‘reducing’ forms to their compositional skeleton, with the objective of highlighting their inherent ‘driving forces’ (earlier defined by Wölfflin as ‘vital forces’) and to eliminate every stylistic-ornamental element (referred to by Wölfflin as the ‘surplus of form’s force’).²¹

It would be excessive to search for a path towards the impending linguistic purification sought by modern architecture within this notational method; however, in an entirely theoretico-descriptive stage – which Ginzburg’s work still reflected in this period – some hints of similar intentions were flourishing, perhaps even intimating later developments. Speaking of the ways with which rhythm’s laws influenced the construction of architectural forms, Ginzburg states that: ‘The same quality of beats and pauses’, i.e. the form of the elements that compose the total figure, ‘constitute the least important problem in the question of rhythm relations since they are secondary functions in the formation of the rhythm.’²² The general rhythm of a façade, the contrast between its full and void spaces, the relations between a building’s horizontal and vertical forces and its effects of plasticity are all more important than the ornamental

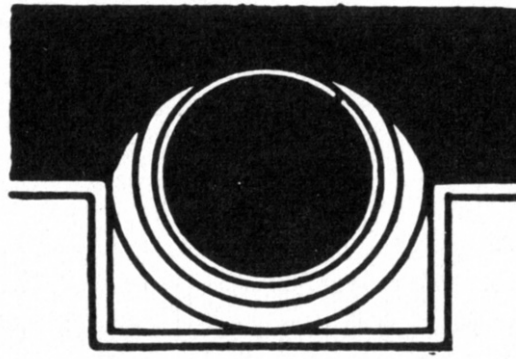


Figure 3: Scheme of a Column Inserted in the Wall (from Wölfflin).

Source: Moisej Ginzburg, *Ritm v arhitekture*, 1923.

elaboration of its detail. All in all, architecture's composition constitutes its quality and its aesthetic value, not its style.

From this fundamental interpretation, it becomes possible to better understand Ginzburg's interest in those German art historians who, during the second half of the nineteenth century, focused on the study of Mannerist and Baroque architecture.²³ The theses of Cornelius Gurlitt, Schmarsow and Wölfflin, expressly quoted,²⁴ are not only useful for building an effective history of architecture. They also help us to clarify, by means of historical examples, its organic and plastic potentialities. To the Baroque style that was generally considered by historians as decadent in comparison with the styles and trends of early sixteenth century architecture, Ginzburg compares readings on the pictorial qualities of that age by German scholars that 'reveal, one could say, the perfection of those works that defined the Baroque style as an autonomous phenomenon.'²⁵ It follows that, in speaking of the colours used in Greek monuments to exalt the functions of their details, Ginzburg criticises the signifying value of color in architecture, and he relates the achromatic "technique" of Baroque buildings, a theme that is amply debated in nineteenth century studies from Antoine Crysostome Quatremère De Quincy to Gottfried Semper:

In any one building of the Baroque period, it is easy to note how, without the contest of colours, there is an vibrant, enchanting and surprising work presented, brought to life by the rich marks of solar light and shadow that are truly pictorial ... It is not colours that make architecture pictorial. This pictorial quality, as a specific compositional method of architecture, must be, above all, a consequence of the primary cause of every architectural form, that is of rhythm and its particularities.²⁶

The illumination of the architectural monument and the dynamic of light and shadow become the most important means for the solution of compositional problems since – as we can recall from both Wölfflin and Ginzburg – architecture is mass, and mass must be modelled. The pictorial aspect discussed by Ginzburg has nothing to do with the ornamental deformation of Baroque facades or with its picturesque character, but it instead refers to the plasticity and to the contrasts that compose it. Therefore, Ginzburg searches for a demonstration in the Baroque of the implied potentialities of composition:

This art, with the fragmentation of its decompositions, with the growing rhythm of every group of elements that creates a whole series of evident and random marks, aims at indeterminacy, at the vagueness of the general impression, which, after the clarity of the canonical order of regular rhythm, becomes better suited to the means of its artistic will. To obtain this immediately, the architect ultimately resorts to the *elimination of the exact outlines and limits of the monument*.²⁷

Wölfflin already attributed to Baroque architects the intention of removing tectonic character from structural walling, and with the moving masses, the “loss” of a necessity to show the building’s internal structure: ‘The Baroque implied a reversion to a more amorphous state.’²⁸

It is perhaps pointless to recall how *Ritm v arhitektura* (as for its German sources in part) is a historiographical speculation that hints, in an entirely retroactive way, at operative intentions. With the crisis of eclecticism and of style as an exclusive factor of the architectural project, Ginzburg attempts to create a kind of new disciplinary rigour, in which the notions of composition, rhythm, space and movement, emerge as devices for its redefinition. Ginzburg seeks the traces of these projectual instruments in history, even if it may be more correct to affirm that they are freely applied to and inscribed upon the past.

As Christof Thoenes has observed, the reading of Baroque architecture has always been strictly linked to the interpretation that art historians have often given to the essence of architecture. ‘If we go back to the times of Borromini, we never find concepts like dynamism or movement ... Dynamism is more of a retrospective projection of the expectancies of the modern and of trends regarding the so-called Baroque.’²⁹ According to Thoenes, the Baroque style, and Borromini’s architecture in particular, was judged by German texts of the second half of the eighteenth century as heretical and impure, exercising an exclusively “moral” criterion.³⁰ The criticism that Thoenes defined “psychological” – in referring to Schmarsow and Wölfflin – had in certain ways deviated from what had been defined as the vision of architecture since the sixteenth century, introducing the categories of space and movement to aesthetic critique: it is a permanent fact, soundly “anchored”, something that did not have to move. As we recall, thanks precisely to Wölfflin and his *Prolegomena*, movement becomes a synonym of expressive emotions, and psychology becomes responsible

for explaining the way in which the observer perceives and understands the sensations expressed in art.³¹ We find these theses at the basis of all Schmarsow's work; for him, architecture, as *Raumgestalterin* (creator of space), must be experienced through its movement. According to Schmarsow, Borromini was motivated by a true 'thirst for movement', and in introducing a 'true ripple in constructed mass', he brought about 'a swelling and inhalation together in harmonic fusion and elastic contraction'. Thoenes points out: 'This is why, for Schmarsow, rhythm is the aspect of architecture perceived in the most direct manner.'³² We might extend this point to position rhythm as an aesthetic criterion that can be extended to the architecture of every period.

Schmarsow publishes other studies in which rhythm comprises a central point of his aesthetic critique.³³ Wölfflin also frequently uses the term rhythm, but with reference to its more specifically descriptive meaning, such as explaining the different criteria of superimposing orders in an alternation of rhythmic trusses. The notion of rhythm, however, also hovers within the writings and slogans of some contemporary avant-garde painting that Ginzburg had the possibility of knowing directly at various stages of his education. Specifically, we can point to the writings and works of Italian Futurism that he had encountered during time he spent in Milan.

Ginzburg and Italy

The young Moisej Jakovlevic, son of an architect from Minsk (Byelorussia), went to live abroad after finishing middle school. Before settling in Milan in 1910, he briefly attended the École des Beaux-Arts in Paris, and for a semester, the Academy of Toulouse.³⁴ After he took the admission exam on November 18, 1910,³⁵ he enrolled in a course of civil architecture at the Politecnico di Milano (Milan Polytechnic), which, at the time, was sharing courses with the Accademia di Belle Arti (Academy of Fine Arts), and was held in the classrooms of the Brera.³⁶ By these circumstances, Ginzburg became a member of a class led by Professor Gaetano Moretti, who generally taught a group of between 13-16 students. It is interesting to note how in the academic years between 1910-11 and 1913-14, besides a conspicuous presence of Poles, Byelorussians and Russians among Ginzburg's classmates, we can find the likes of Giovanni Muzio, Umberto Nordio, Emilio Lancia and Giuseppe De Finetti – an entire generation of extremely talented Italian architects.³⁷ From the same course, only two years before Ginzburg's enrolment, had graduated Antonio Sant'Elia and Piero Portaluppi; while in the junior class, we can find the architect, designer and future founder of *Domus*, Giovanni "Giò" Ponti and the great futurist painter Carlo Carrà, who completed the parallel painting course in 1910.

It was in collaboration with one of his classmates – Naum Kopelovic, himself a Byelorussian from Mogilev – that Ginzburg was to realize his first Russian

project in 1917, the Loksins house at Evpatorija in Crimea, which was published for the first time in the *Stil' i epoha*.

Rhythm is a recurring term within the rhetoric of futurism. The theme's centrality is evident in the titles of such famous works as Gino Severini's *Ritmo plastico del 14 luglio* (Paris, 1913, Plastic Rhythm of July 14th); *Ritmi spaziali* (1913, Spatial Rhythms) and *Ritmi meccanici* (1914, Mechanic Rhythms) by Enrico Prampolini; or the *Ritmo di ballerine + clowns (Lato 1)* (1914, Rhythm of Ballerinas + Clowns, Side 1) by Fortunato Depero. More important than these examples, though, are those writings by Boccioni that theorise this notion and which represent an important source of interest for Ginzburg.³⁸ In the preface to the catalogue of the First Exposition of Futurist Painting that took place in the Galerie Bernheim in February 1912, Boccioni described the objectives that Futurist painting should have *vis-à-vis* the reality that it represents: 'Our painting is made up of *conception* and *sensations* finally reunited ... Although we repudiate Impressionism, we energetically disapprove the present reaction that intends to kill the essence of Impressionism, that is lyricism and movement.'³⁹ And:

In order to make the viewer live at the centre of the painting, according to the expression of our manifesto, painting must be the synthesis of *what one remembers* and of *what one sees* ... In our manifesto, we have declared that the dynamic sensation, that is the particular *rhythm* of every object, its tendency, its movement, or, to say it better, its internal force must be conferred.⁴⁰

In the poetics of Futurism we also find the psychological factor – which the Italian Futurists called “soul status” – opposed to the material reality of represented objects. In Boccioni's text we find some similarities both with *Ritm v arhitektura* and with the German aesthetics of the late nineteenth century: subject and object, perception and sensation concur together to build art forms; rhythm is an expression of the inner forces of the object, of its internal dynamics; movement becomes the theme of the expressive language.

All these convictions – Boccioni writes while speaking about his own works – push me to search, in sculpture, not for the pure form but for the *pure plastic rhythm*, not the building of the bodies but the building of bodies' actions. Therefore, like in the past, I'm not searching for a pyramid-like architecture but more of a spiral-like architecture ... In order to render a body in movement I certainly do not give the trajectory, that is its passage from a resting state to another resting state but I make the effort of fixing the form that expresses its continuity in space.⁴¹

For Ginzburg, as we have seen, the aesthetic value of rhythm lies in the 'systemic decomposition' of elements in their temporal succession. Each of them occupies a 'determined space' and works upon our visual perceptions.

Only a few months later, in “Fondamento plastico della scultura e pittura futuriste” (Plastic Foundation of Futurist Sculpture and Painting), which exalted

the new scientific discoveries revolutionising traditional understandings of physical reality, Boccioni wrote:

the distances between an object and another are not empty spaces but the continuity of matter with a different intensity that we can reveal with sensitive lines, which do not correspond to photographic reality. Here is why in our paintings we do not have the object and the void, but only a major or minor intensity and solidity of spaces.⁴²

For Boccioni, the expression of movement is the quality factor of an object, the one that expresses the soul's state, and its sentiment. As a consequence, art's objective should be the evidence of this quality, rendered through painting or sculpture, that is the plastic rendering of the succession of the soul's states in space. 'We give style and reality to art!'⁴³ He elsewhere writes: '*It is therefore, necessary that form and color represent and communicate a plastic emotion, by wrapping he who observes into a plastic rhythm, and calling "the least possible" to concrete forms (objects) that have aroused it.*'⁴⁴

It is exactly here that Ginzburg's approach distinguishes itself from that of Boccioni and from Italian Futurism. Ginzburg makes use of rhythm substantially in two ways: on one side, in an analytical manner, in order to purify architecture, to undress it of its linguistic connotations; on the other, in an operative sense, whereby rhythm becomes a kind of matrix, a structure that syntactically organises space through its elements. On the contrary, Boccioni seems less interested in the analytical aspect of rhythm and more conscious of the elaboration of a style of movement in which the "pure" rhythm of form is a component to be exalted mainly in the form of a style, and not in the form of a structure or composition, as it is for Ginzburg. The differences between Boccioni and Ginzburg, in this respect, coincide with the distances made in 1914 between Vladimir Majakovskij and David Burljuk, the two main proponents of Russian Futurism, who after some demands of Italian predecessors accused them of promoting only a new style of dynamism.⁴⁵ Finally, it is important to recall that rhythm did not have such a central and exclusive role in Futurist experimentation as it did in *Ritm v Arhitecture*, where, precisely for its "empathetic" traits, it seems more comparable to theories of the German milieu.

Those of Ginzburg's writings to digress into idea influenced by the Futurists, if given due theoretical distinction, remain conjectural and only verifiable through comparison between texts. Beyond those concerning rhythm, other themes could be linked back to the Futurist avant-garde; for instance, fascination with the world of machinery which emerged significantly in *Stil' i epoha*, somewhat augmenting the purely formalist arguments developed in *Ritm v arhitecture*. As will be seen, these interests came about mainly via his relationship with Aleksandar Vesnin and the group of artists that consolidated around the journal *Lef*.⁴⁶

In order to find direct examples of the notion of rhythm, one need only consider Ginzburg's context in Russia: beyond the contemporary studies inside the RAHN – between 1922 and 1923 the RAHN dedicates an academic seminar on this topic – and the indications, if only fragmentary, contained in Naum Gabo's *Realist Manifesto*, there are significant instances issuing from the literary debate during that period, which contain reflections on this topic.

Rhythm in Poetry

Terminating his studies in Milan in 1914, due to the outbreak of the First World War, Ginzburg returned to Russia.⁴⁷ Over the next three years, from 1914 to 1917, he was in Moscow at Riga's Polytechnic Institute where he enrolled in order to complete his artistic education and practice professional architecture with an engineering diploma.⁴⁸ In 1917, he moved to the Crimea where he became director of artistic and architectural conservation services. His work there is documented in a series of articles entitled "Tartarskoe iskusstvo" (Tartar Art) published in five editions (1921-22) in the journal *Sredi Kolekcionerov*, in which the architecture of rural Crimea is described with plans and sketches. From 1921, Ginzburg was again in Moscow and secured his long-term instructorship in engineering at the MIGI and the Vchutemas.

Although direct reference to literal formalist theories cannot be clearly established in Ginzburg's writing, we find great affinities therein with the contemporaneous speculations of the Opojaz circle. In particular, between 1917 and 1922 the Formalists produced a specific literary method around the concepts of rhythm and metre.⁴⁹ Over this period the rhythm of verse acquired a strategic role in poetic studies, indeed becoming considered as the technical foundation for poetic construction. The efforts of the Opojaz circle in their more representative works at this time centered precisely upon linguistic technique. Within this context, due also to the enormous contribution from Russian Futurist poets, the Formalists viewed poetry as the literary form that most closely expressed linguistic autonomy and represented literature in its most extreme manifestation: the aesthetic value of the written word. The redefinition of literary ways and methods that surpass the function in which words merely signify and communicate meaning itself bears a supposition regarding the potential "repositioning" of the verse's rhythm. Rhythm, thought of as technique permitted under the concept of "form", gains principal meaning in the work, acknowledged as the its unique aesthetic value.

Boris Eichenbaum, in his *Teorija "formal'nogo metoda"*, recalls that the first developments of rhythmic studies could be seen at the 1920 conference hosted by Osip Brik at the Opojaz circle in Leningrad under the title *On Rhythmo-Syntactical Compositions* – a conference that would later be called simply *Ritm i Sintaksis* (Rhythm and Synthesis).⁵⁰ This event, although its proceedings remain

unrecorded, underpins a series of articles that Brik published in *Novyj Lef* throughout 1927.⁵¹ Following on from his contributions, there emerged a theory of verse based upon the use of rhythm as a constructive foundation, determining all the elements of the verse, be they acoustic or not. This opened up a whole new area of formalist exploration of literary form and content, becoming defined by Eichenbaum as a kind of “superior theory” to verse. Eichenbaum construed that with Brik

the concept of rhythm loses its abstract nature and enters into a relationship with the same linguistic fabric as verse; with the phrase. The discovery of the rhythmic-syntactical figure once and for all breaks with the concession rhythm has had to something external, as if something remains attached superficially to the discourse.⁵²

In the early 1920s, and apart from being a founder of the *Lef* journal, Brik collaborated inside the Institut Hudozestvenny Kultury (INHUK, Institute for Artistic Culture) and was very close to Aleksander Vesnin and the Constructivist group.⁵³ Together with Rodcenko, Stepanova, Popova, Lavinskij and Vesnin they represented the position of *Lef* in the visual arts; it would be Vesnin himself who would introduce Ginzburg into this circle.⁵⁴

The rhythmic movement is back to front – Brik wrote – it is not the rhythm which can be compressed as the basis for verse, but the opposite with the first last ... Musical rhythm is an alternation between sound and tempo; poetic rhythm is an alternation between syllable and tempo ... *In short when one speaks of rhythm in any context it is recognizable as some sort of periodic repetition of elements in time and space.*⁵⁵

In the first phase of their activity the Formalists examined the history of literature using an approach similar to the methods we find in *Ritm v arhitekture*, as a concrete antithesis to their own theory. Apart from Sklovskij's analysis of Tolstoy and Gogol's gradual narrative process, which demonstrated the centrality of perception in *Iskusstvo kak priëm* (Art as Technique), Brik interprets Puskin's poetry as entirely dependent upon rhythm: rhythm understood as the compositional origin for a series of syllables. Paraphrasing Brik, all of Puskin's language can be defined as a “pure product” of rhythm.⁵⁶ Conversely, Eichenbaum himself, concluding his essay, describes the original Formalist literary “mission” principally through its engagement with history: ‘From the outset we had interpreted our vocational subject as *history* and not as the private interest of any one of us.’⁵⁷ Eichenbaum theorised the historic method of Formalism – for which Ginzburg, moderately following the methodology of Wölfflin and Schmarsow, unabashedly declared:

Thus the history of literature for us is not so much a particular *subject* with regard to theory, but rather a particular method in which to study literature, a decisive separation. So in order to clarify the historic-literary nature of our work; it does

not tend to limit itself to historical conclusions but tackles theory too, towards the imposition of new theoretical problems and the verification of the old.⁵⁸

The evolution of literature was studied to the measure in which it is autonomous, independent of other cultural factors, other meanings, elevated to a sort of overarching framework for literary thought: “useful” in the sense that it could also be used to build a theoretical platform for the present. Sklovskij had, in 1919, already written:

Of all the inspirations that inscribe the history of literature the foremost influential is that of one work upon another ... [It] is not necessary to multiply the causes unproductively, under the excuse that literature is an expression of society, merging the history of literature with the history of commodities. It is a case of two completely distinct things.⁵⁹

In the extricated manner of Ernst Mach’s *Die Mechanik in ihrer Entwicklung historisch-kritisch dargestellt* (1883, *The Mechanics in its Historic-Critical Development*), Eichenbaum posed: ‘This is our principle connection to the epoch. *Science itself evolves and we evolve together with it.*’⁶⁰

Ginzburg and Bogdanov:

Constructivism between Autonomy and Organisation

Although *Ritm v arhitekture* is almost completely divested of direct references to other studies – making any re-composition of the complexity of its intellectual references a daring and arduous feat – it is curious to note how Ginzburg subtly reveals a further direction that we might bring to any analysis of his text. Besides the more strictly disciplinary quotations (Wölfflin, Schmarsow, Gurlitt, Furtwängler, Alberti, etc) mentioned above, within the first two pages we also find the names of Friedrich Nietzsche and Karl Bucher, both used by Ginzburg in order to articulate a core meaning for the notion of rhythm within human life.⁶¹

The universe is permeated by rhythm – writes Ginzburg in the first paragraph – we notice its laws in the movement of planetary systems, in the working man, in the wild animal’s agility, in the river’s currents. *Every scientific hypothesis, every law and philosophical concept of the world are nothing but attempts at finding formulas and definitions that could represent the rhythmic pulsating of the cosmos ...* Also, on the inside of man, the activity of the lungs and the heart, the movement of arms and legs are subordinate to the laws of rhythm that participate in the psycho-physical nature ... It is a kind of superior regulator, of a wise helmsman who guides the activity of the universe in all its manifestations.⁶²

These sentences seem to originate with the 1896 text *Arbeit und Rhythmus* (Work and Rhythm), by Karl Bücher, already available in Russian translation from 1899.⁶³ Bücher’s volume is an enhanced study on the role of rhythm as a structural component of human work: rhythm, as rooted in psychology and in human motor skills, is the basis of every physical movement and, therefore, in

Bücher's view, work is possible – just as every human activity – only through the congenital factor of rhythm.⁶⁴

Bücher concludes *Arbeit und Rhythmus* with a chapter entitled “Der Rhythmus als Ekonomisches Entwicklungsprinzip” (Rhythm as a Principle of Economic Development), in which he describes the growing complexity of society as *Sozialen Evolutionsprozess* (social evolutionary process) made possible by the development of increasingly sophisticated work rhythms: the natural rhythm that ‘economically regulates energetic needs’ promotes, even in the age of the machine, the ever growing subdivision of work. For Bücher, the whole realm of work, from the micro scale of the human body to industrial corporations, is structured by rhythm, which facilitates work as if ‘continuously lubricating its machines’ (*wie das aufgegossen Öl den Gang der Maschine*).⁶⁵

With his hypotheses about the origin of music and poetry as forms of social work belonging to congenital factors of the spiritual universe of man, Bücher is one of the most influential characters of Austro-German *Empiriokriticismus* (Empiriocriticism) that counts, among its main promoters, Ernst Mach and Richard Avenarius. *Arbeit und Rhythmus* is, above all, one of the theoretical pillars of Aleksandar Aleksandrović Bogdanov who, until 1909, and together with Plehanov and Lenin, is among the most important theorists of Bolshevism.⁶⁶ Bogdanov, a kind of “sociologist of knowledge”,⁶⁷ was one of the main protagonists of Soviet Marxism and, for some time, the closest collaborator of Lenin.⁶⁸

In his book *Materializm i empiriokriticizm* (*Materialism and Empiriocriticism*), published in Moscow in 1909 with the subtitle *Kriticheskie zametki ob odnoj reakcionnoj Filosofii* (*Critical Comments on a Reactionary Philosophy*), Lenin harshly attacked Bogdanov for his epistemological positions rooted in Mach's theories; Bogdanov was gradually marginalised from the Bolshevik movement under a cloud of accusation of subjectivism and idealism.⁶⁹ This book is one of Lenin's rare incursions into philosophy, and it conveys a harsh partisan view of the debate on *Empiriokriticismus*, which concerns relations between philosophy, science and politics within the scientific and Social Democratic milieu of early twentieth century Russia. It should be viewed in the context of the successive stages of the Revolution from 1905, as a response to provocations by the influence of Mach's texts in Russian translation, and by the political and revolutionary revisions of Bogdanov.⁷⁰

Without entering too deeply into the specificities of such a complex debate, it is important to underline that it was the autonomy of science and culture *vis-à-vis* the goals for a radical reconstruction of the organisation of both society and ideology that was at stake here, this prefigured by the highly heterogeneous milieu of Russian Marxism. In all these texts, discussion of the role of culture, philosophy and science in politics and in the organisation of a future socialist

community focuses essentially on the definitions of the concepts of reality, truth and experience. It was certainly a discussion that had, at least in the demands made of it by Lenin, a basis that was more political than epistemological.

The group of Bogdanov, Lunacarskij, Bazarov, Suvorov – the main representatives of the Russian “machismo” – together with Maksim Gor’kij, in 1908 promoted the creation of a ‘political party school’, first in Capri and then in Bologna, based on a political and cultural project that aimed at the formation of new ‘leaders with a working class origin’.⁷¹ The school taught economics and social doctrine, the history of trade unions and of German and Russian Social Democracy; it taught relations between state and church and addressed the question of agriculture in Russia. The school was attended by both Russian students and political refugees in Italy, as well as by students who had been chosen by social democratic committees in Russia and secretly transferred to Capri.⁷² The group of teachers, named *Vpered* (Forward), substantially promoted the teaching of what would be defined as the “workers’ culture” (the famous education of a “class conscience”): besides uniting the workers in party or union organisations and encouraging them to partake in the revolutionary struggle, the group’s self-assigned role, above all, was to make studies of science, culture and politics available to the new protagonist – the proletariat – with the objective of stimulating the birth of a consciousness that confronts and identifies itself in common problems and objectives. In other words, through the knowledge acquired by workers, the role of ideology as an exclusive magnet of the community would be scaled down and substituted by a wider “ethical” conscience; this conscience would then become the true binding link of the working class, allowing for a process of identity within common political and economic conditions (“an inner cohesion”, “spiritual unity”).

Lenin interprets this “proletarian socialism” and the appeal to the “proletarian conscience”, already conceived by Bogdanov in earlier texts, as a dangerous anarchic position for the masses to assume.

The background of Lenin’s polemic against Bogdanov and Russian followers of Mach, expressed in *Materializm i empiriokriticizm*, lay with Lenin’s refusal to recognise the rift between knowledge – including scientific knowledge – and reality, while openly condemning the contributions of German scientists to the study of perception, sensation and experience that overturned, or, better, relativised the appreciation of reality. Accusing “mysticism” and “transcendentalism”, and demonstrating no understanding of Mach’s and Helmholtz’s theories, Lenin opposed it with “dialectical materialism” to the ends of reducing gnoseological reflection, and generally all philosophy, to politics. In short, within the debate between Menshevism and Bolshevism during the second half of the twentieth century’s first decade, we witness the establishment of a critical theory (by the Mach sympathizers, the critics of science) that invests

every sphere of the theoretical and political elaboration of Marxism on one side; and on the other, the emergence of the most dogmatic (“orthodox”) formulae, which, from the outset, inflexibly viewed revolutionary action as the only possible destination for the intellectual class: to these instances, the sectors of culture and science were subordinate.

Constructivisms

Although Ginzburg was in Italy from the end of 1910, we cannot demonstrate his presence during the Bologna period of the political party school’s activities. Nevertheless, many instances that lie at the basis of his definition of Constructivism in *Stil’ i Epoha* show a deep knowledge of the Russian debate on Empiriocriticism outlined briefly above. These ideas were circulating in various Moscow circles in the initial post-revolutionary period, both in the Moscow’s INHUK (presided by Brik) and in the Prolet’kult, at least until 1919, when Bogdanov distanced himself from it. Both institutions manifested the need to teach culture and science apart from the influence of political instructions.

For Ginzburg, the architect’s true assignment, in reconstructing the discipline, was to abandon the role of ‘decorator of life’ to become life’s *organiser*. His objective, it follows, was to imbue architectural works ‘*with an authentically modern character, helping to develop a new system for the architectural organisation of space.*’⁷³ In contrast to *Ritm v arhitekture*, which postulates an autonomous architectural vocabulary based on individual-subjective perception, summarised in the search for rhythm’s elements, in *Stil’ i epoha* the theoretical definitions of architecture’s aesthetic value are immersed in the reality of the social, economic and also political facts of the contemporary. In this latter book, however, Ginzburg does not entirely repudiate the theses of *Ritm v arhitekture*.⁷⁴ The architect’s role is no longer exclusively rooted in the definition of the object’s aesthetic autonomy, but becomes that of making his activity tied to the real dynamics of the new condition of Soviet production: ‘For art, and especially architecture, is naturally incapable of leading an existence cut off from economics and technology, as well as from landscape, way of life, and human psychology.’⁷⁵

Therefore, the new definition of architecture becomes: ‘*The fundamental problem of architecture – the delimitation of space through material forms – requires the conformation of elements that operate constructively.*’⁷⁶ The explicit reference to Schmarsow’s definition of architecture as the art of space (*Raumkunst*) is accompanied and enhanced by the quality of the material factor of the architectural organism: that is, the same element constitutes the utilitarian dimension of the construction along with the aesthetic aspect of the form. In other words, for Ginzburg, Constructivism – the new ethics of the operative architect – is a *synthesis* of realism and autonomy. On one hand it is

the search for the objective that corresponds to the organisation of the project's process (which, for Bogdanov, corresponds to the organisation of society, to the socially recognised and organised objectivity and to the socially agreed-upon experience). On the other hand, the formal definition of the subjective element is based on perception (space, rhythm, harmony, composition, etc.), which is the subjective experience and viewpoint theorised by Mach and, later, by Bogdanov.⁷⁷ In Ginzburg's words, architecture becomes an organised management of *organisational levels* in which the architect must succeed both in incorporating the immaterial and spiritual qualities (spatiality) that the form introduces to the subject, and in immersing himself both technically and economically within a productive reality in order to manage the "factoring of society", that is to summarise expressivity and functionality on all levels of the project's process.

The anomaly presented by the historiography of the figure of Moisej Ginzburg inevitably becomes less contorted in the context of this analysis. Not stringently defined by the inner workings of constructivist reality, while at the same time serving as its active theorist, Ginzburg's importance to this grand twentieth century theoretical and projective experience results from many points of view. The substantial merit of Ginzburg's thinking lies in his capacity to reconcile two phases that the avant-garde had roughly sought to separate, disclosing the complex, and in some ways hidden, cultural backstage that inspired his principles: Bogdanov, Bücher, Schmarsow, Wölfflin, Empiriocriticism, literary formalism are merely some of the intellectual references available to his reflections in these years. The notion of *organisation*, which literally invaded programmatic discourses in the Russia of these years, from Lenin to Brik, from Arvatov to Gan, is much more subtle in Ginzburg's hands, as we have seen, than in all others at the centre of its theorisation. Availing himself of Bogdanov's theories, Ginzburg reached an historically singular conciliation between architecture's aesthetic statutes and the unitary role that society demanded from it: his definition of the synthesis, as we have already seen, between reality and autonomy.

There remains much to clarify in the figure of Ginzburg, beginning by verifying the ways in which, from the second half of the 1920s onwards, his theoretical *bagage* transmutes into architectural design. The fundamental issue that emerges from this essay, however, concerns appreciating the measure in which the particularity of Ginzburg's thought comes to stand for that of his generation and which, consequently, reopens, on the basis of this new historiographical consideration, a vital stance within the broader phenomenon of Constructivism.

NOTES

1. Moisej Jakovlevich Ginzburg, *Ritm v arhitekture* (Moscow: Sredi kollekcionerov, 1923). Reference in this essay is made to the Italian translation of this essay in Ginzburg, *Saggi sull'architettura costruttivista* (Milan: Feltrinelli, 1977), 1-66. English quotations are translated from the Italian edition.
2. The preface is dated and signed January 1922.
3. Moisej Ginzburg, *Stil' i epoha* (Moscow: Gosizdat, 1924); English trans., *Style and Epoch*, introduction and translation by Anatole Senkevitch, Jr. (Cambridge & London: MIT Press and the Institute for Architecture and Urban Studies, 1982). Within the Academy – an extremely interesting institution in which important scientists, artists and intellectuals gathered in Moscow in the years after the first world war – he was to read *Stil' i epoha* and some passages of *Ritm v Arhitekture* on various occasions. Refer to *Plan rabot fiziko-psihologicheskogo otdelenija Rahn na 1923 g.* (1923 Work-Plan of the Psycho-Physiological Department of the Rahn), Rossijsky Gosudarstvennyy Arkhiv literatury i iskusstva (Russian State Archive of Literature and Art), Moscow, f. 941, op. 12, ed. hr. 1, l. 3..
4. Han-Magomedov is author of the sole monograph written on Ginzburg: Selim Omarovic Han-Magomedov, *M. J. Ginzburg* (Moscow: Izdatelstvo Literaturi po Stoitelstvu, 1972); Ital. trans., *Moisej Ginzburg* (Milan: F. Angeli, 1975). See, especially, the appendices for Han-Magomedov's extensive bibliography on Constructivism.
5. See also Vigidarija Hazanova, *Sovetskaja arhitektura pervykh let oktjabr'ja* (Moscow: [Nauka], 1970); Guido Canella's introduction to Ginzburg, *Saggi sull'architettura costruttivista*; Anatole Kopp, *Città e rivoluzione: Architettura e urbanistica sovietiche degli anni Venti*, edited by Emilio Battisti (Milan: Feltrinelli, 1972); Ernesto Pasini, *La casa-comune e il Narkomfin di Ginzburg, 1928-29* (Rome: Officina, 1980); Vieri Quilici, *L'architettura del costruttivismo* (Rome & Bari: Laterza, 1969) and *Il costruttivismo* (Rome & Bari: Laterza, 1991).
6. Anatole Senkevitch, Jr., "Introduction" to Ginzburg, *Style and Epoch*.
7. Jean-Louis Cohen's contribution to research on Soviet architecture is indispensable for having articulated its main historiographical problems. In his historical outline of the period 1920-37, the summary and order that he makes out of complex and often contradictory "mini-histories" are surely some of the most detailed and current available to us. I refer to his four essays in *A+U: Architecture and Urbanism* published throughout 1991: "The October Revolution and the Continuity of Architectural Culture. 1900-20," *A+U* 246 (March 1991): 46-57; "The Theory of Constructivism and its Cultural Background. 1920-25," *A+U* 249 (June 1991): 20-41; "Constructivism and the Reconstruction of Society. 1925-30," *A+U* 251 (August 1991): 3-19; and "Late Constructivism and 'Socialist' Realism. 1930-37," *A+U* 253 (October 1991): 11-21.
8. A position that would already be reviewed and reformulated by Ginzburg as part of his next book, *Stil' i epoha*.
9. Han-Magomedov, *Moisej Ginzburg*, 30.
10. Robert Vischer, *Über da Optische Formgefühl. Ein Beitrag zur Ästhetik* (Leipzig: Credner, 1873); August Schmarsow, *Das Wesen der Architektonischen Schöpfung* (Leipzig: Hiersemann, 1894). Translated into English by Harry Francis Mallgrave and Eleftherios Ikononou as *Empathy, Form, and Space: Problems in German Aesthetics, 1873-1893* (Santa Monica: The Getty Center for the History of Art and the Humanities, 1994).
11. Heinrich Wölfflin, *Kunstgeschichtliche Grundbegriffe* (Munich, 1914); Russian edition, *Osnovnye ponjatija istorii iskusstv. Problema evoljucii stilja v novom iskusstve*, trans. and intro. B. Vipper (Moscow: Del'fin, 1922).
12. Ginzburg, *Ritmo nell'architettura*, 41. Italics added.
13. 'For instance, ancient Roman architecture, if analysed only from the viewpoint of its form, merely becomes a decadent later stage of Hellenic architecture. If it is instead examined from the viewpoint of its compositional methods, it strikes us for the wealth of its variety and grammar.' – Ginzburg, *Ritmo nell'architettura*, 41.
14. Ginzburg, *Ritmo nell'architettura*, 41, 66. Italics added.
15. Ginzburg, *Ritmo nell'architettura*, 6. Italics added.
16. Ginzburg, *Ritmo nell'architettura*, 8. Italics added.
17. We are not able to determine definitively if Ginzburg knew the research of Helmholtz (already commented upon and criticised, as we will see later on, by Lenin in 1908), but the texts by Mach and Wölfflin, as we here recall, were available at the time in Russian translation: 'Once again, our eye notes a movement, and it is relieved by a recognition of that movement. The energy spent on perception for a certain movement is economised in a following perception. The eye, in depicting a movement that is already fixed within the conscience, starts to rest at a certain point; the sensation of rhythm comes from the fact that the very movement is received as a

minimum waste of energy, in condensing and enhancing the received sensation, which is the result of "nerve stimulus" that moves from periphery to centre ... The impressions of these sensations are accumulated within the brain and they increase the initial force of the stimulus.' – Ginzburg, *Ritmo nell'architettura*, 8-9.

18. Ginzburg, *Ritmo nell'architettura*, 13

19. I recall here that even Wölfflin did not, in his *Prolegomena*, ever use the term empathy.

20. Ginzburg, *Ritmo nell'architettura*, 63.

21. Both expressions by Wölfflin can be found in *Prolegomena*, op.cit. We borrow the expression "stenographic" from a more general discourse on rhythm: 'The advantage of such a rhythm-stenography lies in the idea that taking fundamental conditions into consideration comprises the seed of that sensory influx which the rhythm of the architectural monument produces.' – Ginzburg, *Ritmo nell'architettura*, 39.

22. Ginzburg, *Ritmo nell'architettura*, 39.

23. Ginzburg does not use the term "mannerism", but, in referring to the Church of the Gesù by Vignola, he speaks of the 'the prefect creations of the twilight of Italian Renaissance'. – Ginzburg, *Ritmo nell'architettura*, 45.

24. Cornelius Gurlitt, *Geschichte des Barockstils, des Rococo und des Klassicismus* (Stuttgart: 1887); August Schmarsow, *Barock und Rokoko* (Leipzig: 1897); Heinrich Wölfflin, *Renaissance und Barock. Eine Untersuchung über Wesen und Entstehung der Barockstil in Italien* (Munich: T. Ackermann, 1888). I recall that Gurlitt, after studying architecture at the Berliner Bauakademie (1869-72), became a student of Friedrich Theodor Vischer at his courses in aesthetics and art history at the Polytechnikum in Stuttgart. The study of Baroque architecture in Prague, Dresden and Berlin brought him to write a section on the Baroque style in *Geschichte der bildenden Künste* (History of the Pictorial Arts) left incomplete by Karl Schnaase, who signalled a detachment from the purely classical interests promoted by Schinkel and the beginning of studies on the Baroque. As editor of the *Stadtbaukunst alter und neuer Zeit*, Gurlitt promoted Bruno Taut's periodical *Frühlicht*.

25. Ginzburg, *Ritmo nell'architettura*, 45. Ginzburg, I believe, uses the expression "autonomous phenomenon" as a non-criticisable expression according to aesthetic canons against which sixteenth century architecture was judged.

26. Ginzburg, *Ritmo nell'architettura*, 46.

27. Ginzburg continues: 'He [the Baroque architect] brings forth his idea, and moves with ease from the idea of the cube to the cylinder, the sphere, to those forms for which there are no defined points of orientation, where *everything is distributed into the infinite rhythm of development*.' – Ginzburg, *Ritmo nell'architettura*, 49. Italics added. Let us also recall a citation from *Bemerkung über Wesen und Geschichte der Baukunst*, by Konrad Fiedler: 'The creation of form must be imagined as a thought process in which architectural forms are its content. The course of this process must be recognised in a way that, when the form changes, the materials and the construction progressively disappear while the form, which is in the mind, develops into a growing autonomous being.' In *Deutsche Rundschau* (June 1878): 361-83. Translated into English as "Observations on Nature and History of Architectura," in Mallgrave & Ikonomou (eds.), *Empathy, Form and Space*.

28. Heinrich Wölfflin, *Renaissance and Baroque*, trans. Kathrin Simon (London: Collins, 1964), 50.

29. Christof Thoenes, "'Die Formen sind in Bewegung geraten': Zum Verständnis der Architektur Borrominis" / "'Form has been set in motion': On Understanding the Architecture of Borromini," *Daidalos* 67 (March 1998): 62-73. According to Thoenes, the word movement appears in seventeenth century documents only to signal the precarious structure of monuments ('the cupola is in movement') and is never used as a metaphor to describe the relationship between an architectural work and a living organism. Thoenes cites an "empathic" that Borromini uses in *Opus architectonicum*: 'In order to lend the façade its form, I imagined a person with outstretched arms wanting to embrace everyone who entered [the part in the middle as the form of a chest].' He defines it, however, purely as 'semantics of a rhetorical tradition'. – 71.

30. Thoenes cites the words that Burckhardt uses to describe the façades of Borromini, the 'curved façades', also found in the writings of Francesco Milizia (who defines Borromini as a 'crazy frenetic'): 'undulations' or 'his undulated zigzag scheme'. – 71.

31. Wölfflin sustains that 'all the most prominent baroque artists suffered from headaches.' – *Renaissance and Baroque*, 164f.

32. These phrases are taken from citations by Thoenes from Schmarsow's *Barock und Rokoko*, which describes the lantern at the Church of Sant'Ivo alla Sapienza. According to Thoenes, this was the argument advanced by one of Schmarsow's best students, Wilhelm Pinder, in his dissertation "Einleitende Voruntersuchung zu einer Rhythmik Romanischer Innerräume in der Normandie," Universität Strassburg, 1904.

33. August Schmarsow, "Rhythmus in menschlichen Raumgebilden," *Zeitschrift für Ästhetik und*

allgemeine Kunstwissenschaft 14 (1920): 171-87; and "Zur Lehre vom Rhythmus," *Zeitschrift für Ästhetik und allgemeine Kunstwissenschaft* 16 (1922): 109-18.

34. In addition to Han-Magomedov's *Ginzburg*, the limited biographical information regarding Ginzburg's education is taken from "Pamjati M. Ja. Ginzburg" in *Arhitektura SSSR* 12 (1946): 53; from a thesis dissertation completed at the architecture university of Moscow, G. A. Berkovic, "O nekotoryh teoreticeskikh vzgljadah arhitekтора M. Ja. Ginzburga, Studenteskoe nauchno obscestvo," MARHI, Moscow, 1962; and from the biography contained in M. G. Barchin, A. V. Ikonnikov et al., eds., *Mastera sovjetskoj arhitekturi ob arhitekture*, 2 vols., (Moscow: Iskusstvo, 1975), 266-76.

35. Register of Alumni from 1907-8 to 1911-12, Archive of the Brera Academy.

36. *Il Politecnico di Milano. Una scuola nella formazione della società industriale, 1863-1914*, exhibition catalogue (Milan: Electa, 1981); see also Luca Rinaldi, Gaetano Moretti, Quaderni del Dipartimento di conservazione e storia dell'architettura (Milan: Guerini, 1993).

37. Aside from Piergiulio Magistretti (Lodovico's father), Luigi Bonomi, Francesco Barbini Belgioioso, Ugo Sommaruga, Vittorio Manfrini, Airoidi, Carlo Cuoghi and Teodoro Volponi. – Register of Alumni from 1907-8 to 1911-12, Archive of the Brera Academy. Among alumnus registrations, course enrolments, papers regarding the school of architecture and its examination results, I have found no information on Ginzburg's activities within the school.

38. There are no current studies that show Ginzburg frequenting futurist circles.

39. Umberto Boccioni, "Prefazione al catalogo della Prima Esposizione di Pittura Futurista," in *Gli scritti editi e inediti*, edited by Zeno Birolli (Milan: Feltrinelli, 1971), 14. Italics added.

40. Boccioni, "Prefazione," 15. Italics added.

41. Boccioni, "Prefazione," 18.

42. Boccioni, "Fondamento plastico della scultura e pittura futuriste" (from *Lacerba*, March 15, 1913), in *Gli scritti editi e inediti*, 42. He continues: 'Everything instead is architecture, because everything in art must be the creation of an autonomous organism with the abstract values of reality.'

43. Boccioni, "Fondamento plastico della scultura e pittura futuriste," in *Gli scritti editi e inediti*, 44.

44. Umberto Boccioni, *Pittura scultura futuriste. Dinamismo plastico* (Milan: 1914), in *Gli scritti editi e inediti*, 32. Italics added.

45. Vladimir Markov, *Storia del futurismo russo* (Turin: Einaudi, 1973); and Cesare G. De Michelis, ed., *Il futurismo italiano in Russia: 1909-1929* (Bari: De Donato, 1973).

46. Substantial doubt remains as to the effectiveness of Futurist influences upon Ginzburg owing to the scarcity of fascination with technology and machines contained in *Ritm v arhitekture*. Only one year later, after confluence with the Moscovites did these themes emerge in Ginzburg's writing, enough to surmise that there was little demonstrable cultural baggage that he exported with him from Italy.

47. Han-Magomedov upholds this assertion based on direct testimony from Ginzburg. See Han-Magomedov, *Moisej Ginzburg*, 12. The Brera Archives attest that Ginzburg enrolled in the academic year 1913-14, but no record remains of him having sat the final examination.

48. The same course of study as Lazar Lissickij who, after passed some years at Darmstadt, returned to Moscow where he completed studies at Riga Polytechnic. Rizskij Politehnik transferred from the Latvian capital to Moscow during the years prior to the War.

49. See Boris Ejchenbaum, *Teorija "formal'nogo metoda"* translated into Italian as "La teoria del 'metodo formale'," in *I formalisti russi. Teoria della letteratura e metodo critico*, edited by Tzvetan Todorov (Turin: Einaudi, 1968), 29-72.

50. Ejchenbaum, "La teoria del 'metodo formale'," 29-72.

51. Osip Brik, "Ritm i sintaksis (Materialy k izuceniju stihotvornoj reci)" [signed 1920-27] in *Novyj Lef* 3 (1927): 15-20; *Novyj Lef* 4 (1927): 23-29; *Novyj Lef* 5 (1927): 32-37; and *Novyj Lef* 6 (1927): 33-39; translated into Italian as "Ritmo e sintassi," in Todorov, ed., *I formalisti russi*.

52. Brik, "La teoria del 'metodo formale'," 55.

53. Lef is an acronym for *Levij Front Iskusstva*, the left-wing art front, a journal published between 1923 and 1925 and which promoted and controlled by a group of Futurist poets headed by Vladimir Majakovskij.

54. Cfr. Han-Magomedov, *Moisej Ginzburg*, 34.

55. Brik, "Ritmo e sintassi," 153. Italics added.

56. Brik, "Ritmo e sintassi," 166.

57. Ejchenbaum, "La teoria del 'metodo formale'," 70.

58. Ejchenbaum, "La teoria del 'metodo formale'," 68.

59. Ejchenbaum, "La teoria del 'metodo formale'," 49.
60. Ejchenbaum, "La teoria del 'metodo formale'," 70.
61. *Ritm v arhitekture* with the citation: 'Rhythm is a compulsion; it engenders an unconquerable urge to yield and join in; not only our feet follow the beat but the soul does too – probably, one surmised, the soul of the gods as well!' – Friedrich Nietzsche, *The Gay Science, with a Prelude in Rhymes and an Appendix of Songs*, trans. Walter Kauffman (New York: Random House, 1974), 138.
62. Ginzburg, *Ritmo nell'architettura*, 6. Italics added.
63. Karl Bücher, *Arbeit und Rhythmus* (Leipzig: 1896); translated into Russian edition 1899 as *Rabota i ritm* (St Petersburg: 1899).
64. To understand the "capillarity" of these theses, we can recall the importance Bücher for the idea of social reform proposed for Hellerau by Wolf Dorn. Compare Marco De Michelis, *Heinrich Tessenow, 1876-1950* (Milan: Electa, 1991), 30-31.
65. These citations are from Michael Golston, "'Im Anfang war der Rhythmus': Rhythmic Incubations in Discourses of Mind, Body, and Race from 1850-1944," *Stanford Humanities Review* 5 (1996). See also "Cultural and Technological Incubations of Fascism," online at <http://www.stanford.edu/group/SHR/> (accessed November 18, 2007).
66. See Massimo Stanzone, "Selezione, organizzazione e metodo scientifico in A. A. Bogdanov," in A. A. Bogdanov, *Quattro dialoghi su scienza e filosofia* (Rome: Odradek edizioni, 2004).
67. This expression is coined by Vittorio Strada in "Né fede, né scienza," in *Fede e scienza. La polemica su "Materialismo ed empiriocriticismo" di Lenin* (Turin: Einaudi, 1982); also Silvano Tagliagambe, *Scienza e marxismo in Urss* (Turin: Loscher editore, 1979).
68. On their relationship, see Jutta Scherrer, "Bogdanov e Lenin: il bolscevismo al bivio," in *Storia del Marxismo. Il marxismo nell'età della Seconda Internazionale* (Turin: Einaudi, 1979), 496-548.
69. Vladimir Ilyich Lenin, *Materializm i empiriokriticizm* (Moscow: Zveno, 1909). Translated into English as *Materialism and Empirio-Criticism* (Moscow: Foreign Languages Pub. House, 1952).
70. Ernst Mach, *Analyse der Empfindungen* (Jena: Fischer, 1886) and *Die Mechanik in ihrer Entwicklung historisch-kritisch dargestellt* (Leipzig: Brockhaus, 1883) were translated into Russian as *Analiz oscuscenia* (St Petersburg: 1903). Bogdanov wrote the volume's introduction.
71. *Pervaja vyshchaja social-demokraticeskaja propagandistsko-agitatorskaja skola dlja rabochih* (First Superior Social-Democratic School for the Arousal and Propaganda of Workers). In August-December of 1909, courses were taught by Bogdanov, the historian Pokrovskij, Lunacarskij, Gorkij, Ljadov, Desnickij, and Volskij. Lenin was invited to participate as a teacher in Capri, but he refused and instead invited some students from that school to follow his lessons in the Bolshevik school in Paris. During the winter of 1910-11, the school moved to Bologna. See Sheila Fitzpatrick, *Rivoluzione e cultura in Russia. Lunacarskij e il commissariato per l'educazione del popolo 1917-1921* (Rome: Editori Riuniti, 1976), 26.
72. From the late 1800s to the early 1900s, a number of schools and Russian associations were established throughout Europe with objective of culturally and politically enlightening Russian emigrants. See Robert C. Williams, *Culture in Exile: Russian Emigrés in Germany, 1881-1941* (Ithaca & London: Cornell University Press, 1972).
73. Ginzburg, *Style and Epoque*, 113.
74. In *Stil' i epoha* Ginzburg often proposes studying the evolution of those compositional styles characterising *Ritm v arhitekture*. It is interesting, in this respect, to cite a passage by Bogdanov on the sense of the study of art history. Beyond the aforementioned influences of Wölfflin and Schmarsow, these phrases suggest yet another affinity between Ginzburg and Bogdanov: 'The treasure of past art must not be assumed passively ... The proletariat must filter the treasure of past art through his own critical analysis, his own interpretation, to discover the intimate elements of collectivism and an organisational sense. In this prospective, it becomes a precious inheritance for the proletariat, a weapon for his battle against the very world that had produced it.' From *Protokoly pervoj vserossijskoj konferencii proletarskih kulturnoprosvetitel'nyh organizacij, 15-20 sentjabrja 1918*.
75. Ginzburg, *Style and Epoque*, 82.
76. Ginzburg, *Style and Epoque*, 96. Italics added.
77. Ginzburg does not renounce the pure-visible effects that had constituted the skeletal structure of his previous writings. Beyond citing Wölfflin and Wundt, he occasionally returns to reinforce the importance of physiological research on the relations between man and the architectural object: 'Along with the experience man gains from dealing with his buildings, he also develops a *complex system for a self-sufficient [autonomous] world* associated with these constructions. Modern psycho-physiology has established that various elements of form (line, surface, volume), both in themselves and particularly in various juxtapositions, engender emotions of satisfaction or dissatisfaction within us, as do certain colors and sounds. Each person develops a purely intuitive grasp of these laws ... Every architectural organism produces a purely physiological feeling.' Ginzburg, *Style and Epoque*, 96.