modulation—an exact parallel, to give one example, to the new scientific conception that a few fundamental laws of nature such as the law of gravitation could be dynamically applied to a variety of individual situations. (Of course, further close musical parallels within this general framework can be cited to the more particular World forms of each era.)

In order for a listener to appreciate such a unified musical form, paralleling the new general form of World, he had to view the progress of the piece as a whole. If the complex sequential development of moods were to be grasped, the piece had to be seen in its totality. The listener's sole preoccupation with the moment-to-moment impact of a piece was thereby necessarily altered; the composition had to be seen as a separate entity, like an object which can be set apart at a distance and whose completeness creates a space of its own. It had to be appreciated as a total dynamic process, with a corresponding space formed of the interrelationship of all its elements from beginning to end. So considered, its space paralleled that of the basic World of the 17th through the 19th century.

What then of today? If the philosophy of World as here briefly outlined is valid, it must, *ipso facto*, apply to itself. The World form of today then must be precisely the realization that the World is essentially human-formed. Rather than residing in a set system of laws of nature, each system is relative to the observer. This is paralleled in music by the abandonment of classic triadic tonality as a structuring element, in favor of new modes of procedure. In the absence of such a culturally pre-given framework, both composer and listener are required to construct significance in relation to each new work. Similarly, the exploitation of spontaneity and unpredictability emphasizes that meaning is whatever you choose to make it. So too, the strong syncopated rhythms of jazz project one forcefully out of this everyday world into more dramatic ones for the sheer experience of taking the trip.

Where it will go now, there is no telling. Yet it is clear that music, like all Art, in dealing with the experiential is as essential as science for the development of our consciousness of World. One can only say, play on.

## Maria Rika Maniates, Musical form: product and process

Since it is impossible in the short space allotted for respondent papers to discuss all the points raised by Miss Carpenter, I should like to focus on what is, to my mind, the most original contribution of her brilliant essay. Her distinction between musical form as externalized product, or a whole piece of music, and musical form as internalized process, or a random series of musical events, yields extremely important ramifications for both our ontological and historical conceptions of music. To mull over terms such as "objective, articulated, spatial, organic, architectonic" is not to quibble over semantics, for these terms reveal how we perceive the world of our experience. They are extensions of our mode of consciousness.

By crystallizing our notion of the musical piece as a complete Gestalt outside ourself, we come to realize that this notion-including as it does the implication of a highly-structured, organic form-is actually relevant to musical works belonging to a particular tradition. The central core of this tradition is strikingly small: Western European music of the 18th and 19th centuries. According to Miss Carpenter, the works of 20th-century composers such as John Cage, the canzona and ricercar of the 16th and early 17th centuries, and non-Western music lie outside this tradition. These works are syncretic, diffuse, and involve the moment-to-moment happening of musical events; they are process rather than product. Our relationship to musical products is such that we tend to objectify "a piece" both perceptually and conceptually. It is a complete, detached and fixed "thing." Our relationship to musical process is such that we tend to participate in depth in the musical activity; since our perception demands total involvement with internal succession of details, we find it difficult to conceptualize musical process in an abstract, objective way. Furthermore, any effort to do so may be entirely beside the point.

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Contemporary philosophies and aesthetics of music seem inadequate because they tacitly attempt to found criteria for understanding the essence of music on the basis of the objectified conception of a musical piece. And yet this conception is applicable only to the local tradition of which Miss Carpenter speaks. For example, Suzanne Langer's theory of music as symbolizing the morphology of feeling and Leonard Meyer's idea of musical affectivity arising from the inhibition of responsorial tendencies both depend on the notion of dynamic, antecedent-consequent discourse in a temporal order of causality. It is impossible to relate their approach to Western music before or after this local tradition, not to mention the enormous field of non-Western music. Miss Carpenter's study points up the urgent need for musical theorists and philosophers to broaden their concept of musical being. In so doing, they would permit aesthetics of music to catch up with recent developments in the general field of ontology and thus reinstate the centrality of their contribution to philosophy of art. Whether they seek to posit a general philosophy of music, or an aesthetic of a specific tradition of music (let us say, that of 18th- and 19th-century style), their results will be all the more valid when put in the proper perspective. Miss Carpenter's discussion of time and duration, while necessarily limited by the nature of her topic, reaffirms my conviction that a study of music as durational happening-that is, an ontological study of the primary mode of music as existent phenomenonmust serve as the foundation for any further philosophical enquiry. Even rather well-worn (perhaps out-worn) dissertations on emotion and feeling in music can benefit from such a study, for it would effectively demonstrate in what areas such searches for the "beautiful in music" could be effectively conducted.

This latter point brings up the question of historical studies. To illustrate the fundamental change from process to product in its historical framework, Miss Carpenter discusses the ricercar and fugue as exemplars of these two types. This choice is indeed a felicitous one since the appearance of the ricercar coincided with the 16th-century idea of "opus perfectum et absolutum." Miss Carpenter points out the importance of a new idea at that time -the notated, published composition-the objective "res facta." Yet this idea is not at all new; elsewhere Miss Carpenter herself states that "our entire tradition of music in the West has been engaged in setting apart the musical object, in stabilizing the musical process into product" (p. 66). Indeed, the development of Western music from the 10th century on can be seen as a long struggle with the problem of notating the aural experience of music, and hence of objectifying the musical work. This concern is peculiar to Western consciousness and sets it apart from other cultures with equally complex and distinguished musical traditions. In the West, as notation slowly perfected itself, it became capable of fixing more and more details of the heard work on to paper. The role of performance improvisation diminished as the sophistication of notation increased. Today, with the possibility of freezing actual heard sounds on tape without the mediation of symbolic notation, the composer possesses immediate control over the objectified aural product; the interpretive role of performance becomes negligible. With the further possibility of electronically generated sounds, this variable factor moves toward total dispensability. The opposite tendency away from total objectification of the musical piece in the 20th century is, of course, aleatoric music, where the performer controls vital parameters of the musical material. By virtue of its diffuse form, however, aleatoric music is process and not product; it therefore does not belong in the historical development of musical objectification sketched above.

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With this long-range view in mind, it is difficult to see that any drastic change in the development of musical objectification occurred in the late 16th and early 17th centuries. What Miss Carpenter implies, but never clearly states, is that a *particularly strong and decisive impetus* toward conceptual stabilization of the musical object took place at that time. Up to the 17th century, the evolution of musical objectification had been a very gradual one involving primarily the changing relationship of notated elements and improvised performance practice. Both these aspects operated within the conceptual arena of musical process—a process which historians call Western polyphony. When ricercar became fugue, the conceptual arena itself changed character—musical process became musical product, and within a short time span there appeared other abstract instrumental forms, such as the concerto grosso, sonata principle, etc. What caused this change that fundamentally altered man's conception and perception of music itself?

It is not accidental that the philosophical concept of the autonomy of "a piece" and the musical concept of abstract, objective forms should appear after the advent of music printing. Marshall McLuhan has based his study

of our changing modes of perception on the successive influence of oral, manuscript, printed, and electronic communication. According to McLuhan, technologies are extensions of our sensory and nervous systems, and ultimately shape our manner of perceiving the world around us. The point is that the musical product, the objective "piece of music," the temporally dynamic, goal-oriented musical structure made their appearance in the Gutenberg galaxy. Printing implied that a pictorial statement could be repeated precisely and indefinitely: "opus perfectum et absolutum." Printing inevitably resulted in the predominance of visual orientation-an orientation which is basic to Miss Carpenter's argument for objectified spatial form in music. Printing surreptitiously led to a mechanized principle of repeatability and a mental attitude of abstraction and classification. It also shaped a form of thought emphasizing linear, causal relationships. These few ideas suggest that the specific impact of printing occupies a most important and central position in Miss Carpenter's thesis. In one sense, printing can be considered as the logical culmination of a development from oral to handwritten dissemination of music. But the medium itself can be the message, and, in this case, the technology of printing furnished the necessary ground for a complete objectification of the musical object.

If we turn to our own century-the electronic age-we are reminded of McLuhan's image, "the global village." The introduction of electronic media has resuscitated a primitive outlook; we now experience in depth and with total involvement. We do not stand outside the work but in its center; we like to participate in a process rather than perceive a product. McLuhan's admiration of John Cage's aleatory compositions is well known. But is process in Cage's music the same as process in pre-Baroque music? Renaissance polyphony, seen from this point of view, appears to be Janus-faced, looking forward and backward at the same time. It is certainly not as objectively causal or developmental as the music of the Gutenberg galaxy; nor is it as completely chance or haphazard as contemporary aleatory. The different degrees and dimensions of musical process-from the minimum to the maximum of possible controlling factors-need more careful study. Returning to our pivotal case in point, the ricercar, Miss Carpenter states that it developed from vocal polyphony of the Renaissance. Her analysis of musical process in polyphony is excellent, but she fails to take into account the fact that Renaissance polyphony is vocal polyphony. While the one-toone relationship of word and tone varied considerably during this period, the total text, either apparently or inherently, determined the over-all dimensions of the polyphonic procedure from the vantage point of the listenerperformer. The ricercar employed the principles of polyphonic process without the text, and herein lies the secret of its problematical status as a successful instrumental composition.

Although it was not possible to do more than indicate a few lines of thought arising from Miss Carpenter's paper, my response attempted to underline the basic importance of her distinction between musical process and product. While her analysis of "product" is carefully executed and provocative, her discussion of "process" seems to need further clarification. Perhaps we can look forward to such a study in Miss Carpenter's future publications.

## Richard L. Crocker

The articles by Miss Carpenter and myself have produced a gratifying divergence of responses. But if the respondents had difficulty responding to us, I, at least, find it impossible to formulate a response to them that is both comprehensive and comprehensible. In availing myself of this opportunity kindly provided by the editors, permit me to make only a very small point and a very large one.

As to the small point, one or two of the respondents seemed confused as to my own position. I was, in fact, trying to be soft-spoken; now let me speak hard: the "common notions" I presented (I think they are clearly identified) are emphatically not my own. I fail to see how any intelligent person, upon due reflection, could continue to subscribe without qualification to those simple-minded ideas I put forward under a politely collective "we." I trust that no one shares the ideas in question; if someone does, he does not share them with me.

Mr. Cone seems unwilling to believe that any intelligent person, even Miss Carpenter or myself, could really intend to take positions as unreasonable as our language might suggest. Mr. Cone seems sure that a quick trip to the dictionary will straighten us out. For my part, I must reluctantly assure him that my position is still as unreasonable as it first appeared to him. Mr. Cone's own position is, of course, quite clear.

As to the large point: I found both encouragement and horror in the fact that Miss Carpenter and seemingly all the respondents either explicitly asserted the decisive importance of historical concepts in resolving questions of aesthetics, or else tacitly agreed to such importance by invoking historical ideas to illuminate their arguments. I myself happen to think that history provides the only reliable answers to such problems, but I did not expect to find a half-a-dozen aestheticians agreeing with me. From this I take encouragement.

What horrifies me is the content of many of the historical ideas invoked. The basic categories in which we have been trained to think about music history are not merely open to question; when questioned seriously, they often turn out to embody outright fabrication with little or no meaningful relationship to observable fact. It would be hard to construct on purpose a more fantastic and unwarranted system of assertions about Western society from 700 to 1500 than the system retailed under the heading "Middle Ages" in books in common use. But, you say, we are not here discussing the Middle