Philip Glass on Composing for Film and Other Forms: The Case of *Koyaanisqatsi*

An Interview by Charles Merrell Berg

Philip Glass is a man of many musical hats. He's a prize-winning composer. He's also a concert performer whose electronic keyboards are an integral part of his theatrical and concert performances. And, as leader of the Philip Glass Ensemble, the acclaimed musical group he formed in the 1970s to play his own works, he's a highly successful entrepreneur.[1] Glass is also a visionary whose basic concepts of artistic creation are centered in collaborative dynamics, a process standing in marked contrast to the Romantic tradition's emphasis on solitary creation by an individual genius, a notion still very much alive in such premises as cinema's auteur theory.[2] Glass, as I will suggest, can also be thought of as a member of the vanguard of contemporary performance artists.

The positioning of Glass as a performance artist is based in large part on Philip Auslander's seminal article, "Going with the Flow: Performance Art and Mass Culture,"[3] as well as a brief consideration of Glass's prolific and multifaceted career, and most significantly, in terms of the interview which follows, an examination of Glass's involvement with *Koyaanisqatsi: Live*, the multi-media performance event featuring Godfrey Reggio's 1983 film and Glass's "live music" score which toured throughout the United States in the Fall of 1987.

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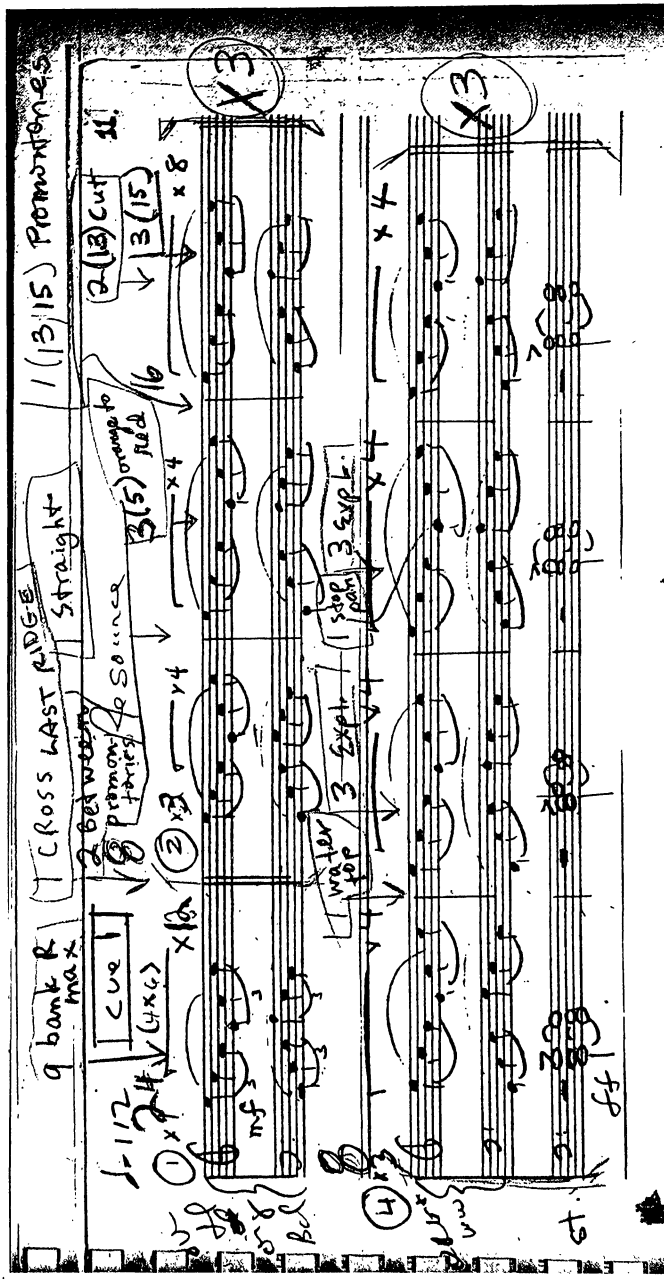
Auslander, in linking performance art to the postmodern and interactive worlds of media and popular culture, provides a virtual taxonomy of *au courant* attributes which inform and largely define the variegated and illusive phenomenon of contemporary performance art and, by extension, much of the work of Philip Glass. Auslander's basic tactic is one of comparison, the compilation of a veritable balance sheet of performance art premises from the 1960s/1970s, set in apposition to those of the 1980s, and by implication, the 1990s. At the risk of oversimplifying Auslander's compelling analysis, I would like to focus on several key elements which, as Auslander argues, have emerged during the transition from the first generation of post-war conceptual performers to today's media-aware generation of experimentalists, elements which help establish Glass's credentials as a performance artist.

Central to Auslander's presentation is his positing of performance art's general movement away from the margins and into the very vortex of popular culture. It's a trend that has been facilitated by the enthusiastic embrace of all media, by all manner of performance artists, from Laurie Anderson to the Living Theatre. And though at one time such "co-optations" were regarded as expedient, as the means of financing one's "real work," today, with only few exceptions, performance artists actively seek the attention and, indeed, the varied rewards afforded by the rapproachment of performance and entertainment.[4]

The move from marginality to marketability, from self-styled esoterica to commodity art, is one that, not surprisingly, has offended performance purists such as Linda Frye Burnham who sees mass culture as "hegemonic" and only vanguard art as "counterhegemonic," and therefore subversive.[5] Auslander discounts such claims by suggesting that mass culture itself has taken on the potential of being "a site of possible resistance to the mainstream."[6] Drawing on the work of a number of contemporary media theorists, Auslander urges a rethinking of performance art based not just on microtextual studies, but, more significantly, on intertextual approaches such as Raymond Williams' notion of "flow."[7] In the process, Auslander challenges such notions as "high art" and the presumed superiority of "live" vs. "mediated" performances. And in citing Andreas Huyssen,[8] he reminds us that it was the culture industries, not the avant garde, which succeeded in radically transforming everyday life in the twentieth-century. Auslander concludes that "postmodern art does not position itself outside the practices it holds up for scrutiny. It *problematizes*, but does not *reject*, the representational means it shares with other cultural practices."[9]

How does Philip Glass tie-in to Auslander's ideas on post-modern performance art? First, Glass exemplifies the embrace of media and other high-tech means of artistic production. For example, the sound-generating equipment used by Glass and his Ensemble is nothing short of state-of-the-art.[10] His conscious decision to break out beyond the confining walls of the concert hall through collaborations with filmmakers such as Godfrey Reggio



Excerpt from Glass's score for *Koyaanisqatsi* with conductor Michael Riesman's annotations indicating precise points of synchronization between images of the film and the accompanying music. Courtesy of Philip Glass and Michael Riesman.

Philip Glass. Photo by Tom Caravaglia.

and Paul Schrader, as well as with other multi-media artists, is another indication of his desire to reach larger audiences through artistic exploitations of the media.[11] Related to such projects is his very active recording career and his "exclusive composer" contract with CBS Records (a distinction shared only with Igor Stravinsky and Aaron Copland), which further points out his success in establishing a stature as a "serious composer" as well as a potent box office draw.[12] Indeed, Philip Glass is a perfect exemplar of Auslander's notion of the rapproachment between performance art and entertainment.[13]

In the case of *Koyaanisqatsi*, one can clearly read the film as having a politically subversive message, as embodying a critique of the destruction of Spaceship Earth by modern man and his polluting technologies.[14] But, aside from its status as a clarion call for environmental action, one can also "read" the 88-minute, non-narrative film as a "head movie" for people ranging from, as Michael Dempsey puts it in a recent article in *Film Quarterly*, "un-constructed hippies to New Agers, who like blissing out to lulling music and pretty pictures and don't care about 'meaning.'"[15]

As for intertextuality, *Koyaanisqatsi* exists in several forms. First, it is a feature film that was released in 1983 with great critical and box office success.[16] It also is a highly profitable video release, as well as a top-selling musical recording available in compact disc, long play and cassette tape formats.[17] Along with its conspicuous success as a multi-textual commodity, it is also a concert piece in the repertory of the Philip Glass Ensemble, albeit in highly excerpted form.[18] And finally, *Koyaanisqatsi*, at least during the Fall of 1987, can be regarded as a mass mediated performance event with its musical score performed "live" by the Philip Glass Ensemble.[19]

The following interview with Glass was recorded on the morning of November 11, 1987, following a sold-out evening performance of *Koyaanisqatsi: Live* presented on November 10, 1987 at the University of Kansas in Lawrence. Glass is bright and articulate; he's also quietly confident, especially about his own views and working methods. And, in spite of his huge critical and popular success, he's gentle, even humble and somewhat self-deprecating. He is also inquisitive. During our conversation, for example, he asked as many questions as I did. He wanted to know about how people responded to the performance. And he wanted to know more about film and film music theories, areas that he freely acknowledged he knew little about.[20] Still, when sharing his views or discussing his working methods, Glass speaks with calm assurance. The interview, while alluding to many of the points discussed by Auslander, also raises an aspect of performance art that has received little formal attention, collaboration. Indeed, Glass's concern with collective rather than individual visions, is one of the hallmarks of his work as both composer and performer.

Berg: Tell me about your relationship with Godfrey Reggio in the production of *Koyaanisqatsi*.[21]

Glass: Well, we don't have a relationship in the sense that one has a relationship with a collaborator, say, in theatre or dance. Film, as you know, is peculiar in that the music is usually done at the end of a project. But, I've been somewhat fortunate. When I first started work with Godfrey, he'd only shot about sixty percent of *Koyaanisqatsi*. That was also the case, I might add, when I worked with Paul Schrader on *Mishima* [directed by Schrader; released in 1984]; there, I became involved before we started shooting. Actually, I guess I don't really like to work on films, but if I do, it has to be with some participation.

Berg: So genuine collaboration is the key for you?

Glass: Yes.

Berg: What about the film's subject, its style?

Glass: Well, as you know, it's very hard to tell what a film is really going to be like. Therefore, when people tell me about film projects, they all sound wonderful. So if I'm trying to make a decision about a commitment, I look at who the director is, the other artists to be involved, and the overall working conditions; the subject matter is important, of course, but only in a general way. For instance, the subject of *Mishima* appealed to me because I had read all of Yukio Mishima's books that had then been translated.

Then, I read the Schraders' script [*Mishima* was co-written by Paul and Leonard Schrader], and I liked it. So I decided to do the film. But even then, I really couldn't predict that the film would turn out so well. But, as Paul and I looked through the script, he encouraged me to put music where I though it should go. He did indicate several places where he thought music was needed. But, essentially, he left it up to me. So, in a way, I ended up writing to the script rather than to actual images.

Working with that process, I recorded a work tape from which Paul made the first cut. I then had to go back and rephrase the music to fit specific cuts. Some of the cuts, in terms of the music, were a bit arbitrary. In other words, if he wanted a scene shorter, he simply cut it; that meant, of course, that he had simultaneously cut the music. He'd then say, "You figure out how to end it here."

In effect, I really ended up writing the score for *Mishima* twice. First, I wrote the initial score, the work tape. Then I had to go back and recalculate the music to fit the actual cuts of the final print. Instead of using a composite sound track with dialogue, music and sounds, we used twenty-four separate tracks of sound in the final mix. The producer was a bit nervous about it

because of the added expense. So we had the visuals turning as well as each of the twenty-four sound tracks. It got pretty complicated. But, it allowed us to be much more subtle in the mix. For example, when we got to places in the picture where the dialogue begins, instead of just cutting or fading the music out, I could cut off, say, just the first and second violins, thereby leaving only the violas. In other words, I could tailor the music to the real sounds of the film instead of simply having the whole ensemble go either completely in or completely out.

Berg: *Mishima*, of course, is a very different film than *Koyaanisqatsi* in that the music for *Mishima* had to be choreographed with the interplay of other audial elements such as dialogue and sound effects.

Glass: Yes, the work on *Koyaanisqatsi* with Godfrey was much more of an equal collaboration in that we conceived the film as a real symbiosis of music and image.

Because Godfrey was aiming for a world-wide audience, the film had to convey its point entirely through these two universal, international languages of image and sound. *Koyaanisqatsi*, in fact, has been shown all over the world. The point is that there was nothing that required translation. But this meant that we had to work out a process of structuring the elements in a very close way.

When I first met Godfrey and we began to talk about the project, he had only shot about sixty percent of the film. The first thing that we did was to divide up his images into what he called subject-roles. There was one category for "clouds." Another was called "vessels" for planes and cars, and that sort of thing. But then, after working out the subject-roles, we developed a dramaturgical plan. In other words, the structure of the film became a sequence of the subject-roles which produced a kind of consecutive line of thought, rather than a traditional narrative.[22] At the opening of the film, we start in Monument Valley, then we go to the city. Later, we witness the destruction of the city and the failure of the urban environment. So it becomes a progressive sequence of dramatically structured subject-roles. It seems to work, so I'm glad we did it that way. But actually, at another level, this consecutive thought process is just as narrative in nature as any Hollywood story-film.

Koyaanisqatsi doesn't have a clear-cut beginning, middle or end. Actually you could rearrange its elements in various ways. And we did do that. Eventually, however, we realized that there was a requirement for some kind of order. Frankly, we wanted to end up so that the film's images had a dramatic impact. And that's where Godfrey was able to rely on my experience in the theatre [mainly ballet and opera], where dramaturgical concerns underlie the structure of the work. So when we applied that concern to a non-verbal

film, what we were looking for was some kind of dramatic shaping of the kind one would find in an opera or ballet.

As you look at the film from that point of view, you'll see an overall dramatic slope. It does have a quiet beginning as well as a crescendoing series of dramatic segments each with its own kind of visual energy and excitement. There's also a quiet ending, a long epilogue, which ends the film. So you can actually map out a dramatic structure along a curve if you want to. And, actually, this was done before I started with the music.

Berg: By both of you?

Glass: Yes, we did it together. In fact, what I brought to the film was a set of varied experiences in working in that kind of way. What Godfrey brought to the film was his own personal vision in terms of the particular subject matter. He knew what he wanted to say about "life out of balance," and how he wanted to present that in visual terms. He had what he called "different modes of viewing" which were achieved technically through extreme time-lapse sequences with greatly accelerated real-time movements; at the other end were the slow-motion sequences.[23] Part of his visual vocabulary involved going in and out of normal-time contexts. What we did together, then, was to work out the dramatic structure. Then I began to write music for the different subject-role sequences which were now in the proper order, but which were not yet edited. For example, we had planned for a ten-minute cloud sequence, but the individual shots weren't in any particular order. So I just wrote a ten-minute cloud piece, but without reference to any particular cloud images.

Berg: That seems a bit chancy, especially if the final cut for such a sequence turns out to be appreciably shorter, or, perhaps, even longer.

Glass: Well, this kind of process is actually my specialty. This is what I am best at, probably because I've been working in the theatre for so many years, and also working with visual artists. I've learned to develop musical-visual interactions whether the context is balletic or operatic. I've even written music for sculpture. So this is one of the situations I'm very experienced with.

An important part of the process is becoming involved in the subject matter. But apart from that, I'm also learning that the music can play within the image in a number of strikingly different ways. Now, you know I'm not a theoretician about this, and haven't read any books about it. But as I work, I'm aware that the music can be placed in the image in various ways. It can be what I call "under the image," or it can be "on top of the image," or it can be right "next to the image." In a sense, we're talking about whether the music is essentially in the foreground or background.

Now sometimes people talk about going with the image or against the image. That's a much simpler idea because you can be in back of the image

and still go against it, or you can be in front of the image and, again, go against it. In other words, it depends on where the music is placed in terms of what you're looking at.[24]

Sometimes the music is the subtext of what's on the screen. It forms the emotional viewpoint of what we're watching, but it doesn't necessarily sound like what we're looking at. For example, with the clouds in *Koyaanisqatsi*, I decided to use a fairly analogous or allegorical musical image to go with the clouds. I picked large, slow-moving clusters of brass which became, as I said, an allegorical visualization of what's on the screen. In this case, I was right on top of the image.

Berg: Can you specify what you mean by allegorical? And, also, your rationale for using brass rather than, say, reeds?

Glass: Well, this is part of the artistic process where you get to make your artistic choices. One artist will say, "clouds sound like brass to me." Another artist will say, "they sound like strings to me." But, still, that's an important issue to consider because it involves the ways in which we, as individuals, personalize these things. It's not really important that clouds sound like brass to me, but rather that I make the use of the brass a convincing artistic decision. That's what's important.

Berg: To me, the cloud music works well in giving the images a certain sense of majesty, perhaps even gravity.

Glass: Exactly. That, I think, underscores my perception of what Reggio was trying to get at . . . that awesome magnificence of nature. In a way, I regarded the clouds like I regarded the music, as a huge mass of forms which actually have no physical substance. And yet at times, the clouds as well as the music, did have a sense of artistic weight, and, as you suggest, gravity. By the way, some of those cloud images, though they appear as if they had been photographed from planes, actually were shot from mountain tops.

Berg: The scene with the take-off of the Boeing 747, at what I assume is LAX [Los Angeles International Airport], is another case where the music influences our "reading" or understanding of the scene.

Glass: That's right, it was LAX. And for that, I used voices. There, I was working somewhat differently. In a strange sort of way, the voices became an aspect of the plane. Not the whole plane, because the plane itself is a tremendously huge and massive machine. Still, one of a plane's interesting qualities is its lightness; at moments, it actually seems to be lighter than air. So, I took that special facet of a plane in flight, its lightness, and made it the basis of the musical image, in part, by using voices.

Berg: The image of the plane in *Koyaanisqatsi* has a kind of ethereality because of Reggio's use of an extremely long telephoto lens which catches and distorts a welter of heatwaves undulating up from the runway. Consequently, the plane seems to shimmer and palpitate in almost organic fashion.

Glass: Well, what interested me about that huge plane was its appearance of seeming to be lighter than air. I therefore decided to make the music about the quality of lightness, an aspect underlined by the voices. So, when we see the plane, we hear a very ephemeral vocal texture. In a way, it's a poetic metaphor. We could have looked at that plane in a very literal way. But, with music, there are many other ways of "looking" at a given object.

Berg: Can the film's conclusion also be regarded as emplifying that kind of poetic metaphor?

Glass: You're talking about the scene shot in Harlem, I think in 1978, during the power blackout when all the electricity went off, and everyone was down in the street. Well, not exactly. Instead of being metaphoric, it's an example of a situation where the music is way down under the image. Here, the music is subtlely commenting on what we're looking at; in fact, the words are the words of the [Hopi Indian] prophesies that we also hear at the very end of the film. That's what the voices are articulating. So, I wasn't looking for a metaphor for the image, but rather a subtext for the image.

Berg: That's a fascinating point because the words are in the language of the Hopi Indians. And though the words have a specific, literal meaning for those fluent in Hopi, it's a meaning that goes right past the bulk of the film's audience who, of course, don't speak Hopi.

Glass: Well, Godfrey did place the words in translation on the screen at the very end of the film. Personally, I would not have done that. But I understand his thinking. Film, of all media that artists work with, is the most public. It has the broadest appeal and addresses itself to the widest spectrum of the population. Furthermore, Godfrey didn't want to create an atmosphere where the film would seem removed from anybody. So he literally translated the words.

Working on the operas I've done, I've learned that language can function in a variety of ways. There are, for example, situations where the words form a kind of subtext, but with musical rather than literary significance. In these cases, it's not really so important that audiences understand the text in a literal way. However, Godfrey, at least at the end, wanted the meanings to be clear, which I understood, again, given the public nature of the film medium.

The musical setting of the words was interesting because I had to study the phonetic, or vocal inflections of the Hopi language. As with all languages, a lot of the meaning is conveyed to us through the rhythms and inflections of the speech, the spoken language. You can learn the vocabulary and syntax of a language, but if you don't speak with the rhythms of a native speaker, you're not going to be understood. So, as far as possible, I studied the Hopi's speech patterns and then set those speech patterns into the music.

Later, when I recorded the score with a group of New York musicians, I sent a tape back to the Hopis in New Mexico to check with them to see whether the words were comprehensible. They said they were. So, I would hope that if a Hopi Indian should happen to be in the audience, he would understand the words in a literal sense.

Berg: Does it actually matter if the words are intelligible to a Hopi Indian?

Glass: Yes, I think it does, because if you take the kind of care we took with the language, it translates into a feeling of authenticity that most people can sense if not actually understand.

Berg: It seems as if you're talking about artistic integrity.

Glass: That's part of it because if you bring a high level of concentration to the work like a good actor, it helps convey that feeling of authenticity. And if you don't do it, if you're careless about it, or do it without really caring, invariably that lack of concentration or concern comes across.

But as you know, the relationship between music and image is a very complicated one. There are some filmmakers, for instance, who really know how to work with music, but then there are many more who really don't appreciate it. Paul Schrader, as I've said, is very intelligent about music. In our collaboration for *Mishima*, I discovered that Paul is very astute about combinations of images and music. He knows where to put it. He knows how to use it. He knows when it's needed.

For film, music, next to primary visual aspects like cinematography and color, is probably the most important element. Yet to those of us who are in the business of making movies, we act as if music is almost an afterthought. That, of course, is terrible. It's more than a mistake because it means that those who treat music as an afterthought have lost a powerful artistic ally.

People like Schrader, though, know how to use music as an ally, to bend it to the needs of the film. These are the people who are capable of letting the music add an extra dimension, an extra emotional and dramatic charge that less careful directors and producers simply do not have access to.

The Philip Glass Ensemble. Photo by Tom Caravaglia.

Berg: Has your work been influenced by any of the well-known filmmakers, composers or theorists who have speculated about the formal relationships between image and music? For example, the great collaborations between Soviet filmmaker Sergei Eisenstein and Soviet composer Sergei Prokofiev for *Alexander Nevsky* and *Ivan the Terrible* spurred Eisenstein to write rather extensively about music's role in film. Eisenstein's notions on what he called "vertical montage" as well as his particularly close working relationship with Prokofiev seem to parallel many of the formal as well as interpersonal dynamics that arose in your own collaboration with Reggio for *Koyaanisqatsi*, as well as for the forthcoming *Powaqqatsi*.[25]

Glass: Yes, I've heard about the Prokofiev scores for Eisenstein. But, actually, my information comes from a very different set of sources and experiences. As I mentioned, my basic background comes from theater.

Berg: You're including opera and ballet here?

Glass: Yes. For me, the two most important theatrical influences were working with Julian Beck's Living Theatre and then with John Cage and Merce Cunningham.[26] In those instances, we're talking about situations where the meanings arose from juxtapositions of image and music, *but* in a more spontaneous way. When I think of Cunningham and Cage, for instance, the meanings of their fusions of dance and music are essentially inferred; and inferred, generally speaking, by each individual viewer. Their work did not have implicit content of its own. In other words, it was a situation where individual members of the audience had to make up meanings for themselves.

Now I don't approach it in that way. Nor have I used random chance procedures like Cage in my work. But the lesson of including the viewer wasn't lost on me. So, for example, if you tell a tenth of a story, the audience will make up the other nine-tenths of the meaning, or narrative, or whatever the case may be. In fact, very little of the story needs to be told. Here, I'm essentially talking about telling some kind of narrative. But really, it's exactly the same as far as how things work in my own collaborations.

Early on in my work in the theater, I was encouraged to leave what I call a "space" between the image and the music. In fact, it is precisely that space which is required so that members of the audience have the necessary perspective or distance to create their own individual meanings. If you didn't have that space there, if the music were too close and therefore immediately on top of the image, there wouldn't be anywhere for the viewer to place himself. In that case, it's like what you end up with on commercials. That's why television commercials end up looking more like propaganda than art.

Really, I can't believe the music on most commercials. The music tells you exactly what to look at, at each and every second. It's as if the filmmaker and composer were taking their hands and actually guiding your eyes around

the screen. And this is exactly what you get in propaganda. They're not allowing you to look. They're *making* you look. They don't allow you to see and react or think for yourself.

Now what I do, what I learned from the theater, is that the big space that you leave between the viewers and what they're looking at becomes the area where they personalize the work. We're all twentieth-century people and in various ways we've learned to look or visualize that way, whether we know it or not. We're not nineteenth-century people, we don't look the other way. What's funny, and really odd and thoughtless in a way, is that the world of music for film, television and commercials hasn't made the move at all. Yet it's there in the world of dance and theater, especially the progressive world of experimental dance and theater, and also in the work of the more progressive people in film and video. But as it enters the mainstream world of media, it will change the way we use music in commercial film and video as well.

Berg: To me, one of the fascinating aspects about viewing *Koyaanisqatsi*, a second, third or fourth time is the way in which the meanings or experiences evoked by the film modulate from screening to screening. Last night, for example, my experience of the film was quite different than it was several years ago when I last saw it.

Glass: Exactly! You did notice that. Good. I, too, am very struck by that dimension. Four years ago, for example, we thought *Koyaanisqatsi* was a very political film. Now, it doesn't look that way at all to me.

Berg: Yes, I agree. Now the film's critique of modern society is almost secondary. The images of the 747s, the skyscrapers, even the traffic, have a vitality, and a sense of beauty, experiences that are more typical of the experimental film or the more poetic forms of the documentary.[27]

Glass: Yes, that's very accurate. We look at it differently now. Really, it's been very instructive for Godfrey to see how much it's changed. And, really, I think it's changed because we didn't apply too formulaic an approach to it which has allowed the film to survive, to change with the times.

Berg: Let me shift the conversation from your relationship with Godfrey, to what we saw last night, "the live performance-screening" for want of a more felicitous phrase. What was the motivation for going out on the road with the Ensemble and the film?

Glass: Well, the idea came essentially from Tom Luddy, Francis Ford Coppola's director of creative services. Luddy had been involved with the

presentation of Abel Gance's *Napoleon* with Coppola's father, Carmine, conducting a live symphonic score in a road-show tour of the film.

Berg: It was an incredible event. The performance in Kansas City is still one of the most vivid experiences of a film that I've ever had. There was Carmine Coppola's wonderful symphonic score, as well as the restored 35mm print of Gance's 1927 masterpiece. One index of the project's success is that *Napoleon* was literally seen in a new light, a light which provoked many critics and scholars to reposition *Napoleon* as one of the unqualified landmarks of the silent era.

Glass: It was immense! I saw immediately that the live music heightened the impact of the images. I also realized that this was a phenomenon from the silent film days that we've lost track of. You and I weren't alive for it, but in the history of film, we've let that special dimension that live music provides get away. But when I saw that Tom had recaptured it with the *Napoleon* project, I realized that our own project was a candidate for that kind of presentation. Tom is a friend of mine, so we talked about how *Napoleon* was organized. I asked if such a venture could actually work in terms of being profitable. Tom said that they actually had made a lot of money with it.

Our project isn't that big of a money-maker, but it hasn't lost money either. Last night, for example, we had over 2,000 people which was rather impressive, I thought. And, they really seemed to like it. Also, it's nice to have the score breathing anew with each performance. I remember that when we finished the score and locked it into the sound track for *Koyaanisqatsi*'s first release, there was a part of me that regretted having to set it, so to speak, "into cement." Now, on this twenty-five city tour, the music is free and living each night.

Berg: How did you prepare the Ensemble for the job of synchronizing the score so that the "live" accompaniment would mesh with the images as tightly as the original recorded soundtrack had?

Glass: First, there was the task of transcribing what was originally a symphonic score down to a reduced score for a travelling ensemble of some ten musicians. Next was seeing if we could actually meet the challenge of performing the score live so that it synchronized with the images of Godfrey's film.[28] That's why it took several years to prepare. Then we had to go out and actually book the tour. What we're now discovering is that the music is actually becoming very alive and responsive to the film. For example, last night, we noticed that Michael [Riesman, the Ensemble's conductor] was creating dynamic shadings that weren't in the original score. And I thought, well, that's what we really wanted to happen.

Berg: Even though it constitutes a change in what you wrote for the original score?

Glass: Yes. It's actually a process we've never had an opportunity to explore. And Michael was responding in the way that any good musician would respond to a piece of music. If, for example, you were to give Michael, or any competent musician, a piano piece, after he'd had a chance to play it ten or fifteen times, he'd begin to personalize it. That's what you want from a sensitive interpreter. So, the conductor has to be the interpreter.

Berg: Since you're the Ensemble's leader as well as composer, why have you left the conducting chores to Michael?

Glass: First of all, when we made Michael the conductor, we did it because of his technical capabilities. He has a very precise sense of time, something that I just don't have. The fact is that with my sense of meter, there's a lot of drift. When I play, it's not at all metronomic. But Michael can do that. So it's a skill. And Michael is a very accurate musician and he's studied it. I haven't. I was spending a lot of time learning how to write the piece.

So Michael's time is metronomic, almost like a clock. He's the right person for the job. Now I don't know how well you know the film, but Michael was never more than a few frames off [each motion picture frame is held in the projector for less than 1/24th of a second; standard film speed is 24 frames per second], only a fraction of a second from perfect synchronization. And when I say perfect sync, I mean the sync that we're accustomed to seeing in the film with the recorded soundtrack.

Berg: I understand that the conductor's score includes drawings that match up with key images in the film, which seems analogous to the story-boarding process which many filmmakers and animators use for pre-production planning purposes. Is that how the synchronization is maintained?

Glass: Yes, Michael does it visually. First, he took the score and memorized it. He knows what he's supposed to be seeing at any given moment. Then he put pictures on the score itself, in the margins. So he has visual cues which now function as reminders of key points in the synchronization. At this juncture, we're in city number twelve of a twenty-five city tour. Also, we rehearsed for about two weeks. In addition, Michael rehearsed with a video of the film and the score before we even rehearsed with the musicians. So I would say that Michael knows the film rather well. Now, it's all really quite tight.

Berg: When you were here two years ago with the Ensemble, there were some people who objected to what they perceived as volume levels that were

excessive. Last night, though the music certainly had presence, I didn't hear a single complaint about the volume. With your battery of electronic keyboards and amplification equipment, how do you monitor volume levels?

Glass: Well, on this trip, it's much better because we have a mixer in the hall. Someone is actually out in the hall with the audience which makes it much easier to control. Often we have a mixer on stage as well. So we're constantly trying to monitor the feedback from the mixer to get the volume right. But it's always a difficult challenge, and each hall has its own acoustic idiosyncracies. How was it last night?

Berg: Fine

Glass: I thought it was excellent. And as you know, we only had a very short sound check because a plane had been cancelled. But, we had played the room before which was a big help.

Berg: One of the intriguing aspects about the "live music" *Koyaanisqatsi*, as well as the "live music" *Napoleon*, is that each performance, as you've suggested, seems to have an identity or signature all its own.

Glass: Well, the music acquires, say, a living relationship to the film. Actually, the problem with film, something I think even the most ardent film buff would agree with, is that it's frozen in time. It becomes a document. It can't be changed. I suppose you could go back and change some things, but that doesn't happen.

There's a story about a great French painter. When he was an old man, he'd often be found in the museums of Paris touching up his paintings! The guards, of course, would throw him out. But he was doing what any artist wants to do! He was trying to keep the piece alive! And that's very difficult to do with film.

In fact, when we look at a film, even a classic like *Citizen Kane*, what invariably happens is that we are forced to include an element of nostalgia about what we're looking at. It can't become new again. So that film, in a sense, has become history.[29]

Film becomes history more quickly than other arts because it doesn't have the means of adjusting to the flux of time. Of course, it's also true of painting, but at least paintings, and this is an odd way of putting it, deteriorate to a certain degree.[30] What bothers me about film is that, unlike the opera and ballet scores that I do, the film scores are set in cement so that I can't do anything about them. The exception, of course, is something like we're doing now with, as you put it, the "live music" *Koyaanisqatsi*.

In this case, I can see what happens with the film's score. The same thing applies to my concert music, as well as to the operas. When, say, an

opera is revived, it's a different proposition, a different conceptualization, even though the score is followed exactly. It's similar to the contrast in how an actor will read Shakespeare when he's fifty, rather than when he's twenty-five. So, in film music there's virtually no opportunity to be an interpretive artist. But on our tour with *Koyaanisqatsi*, changes, as I mentioned, are taking place in the score. In the clouds sequence last night, for instance, I noticed a long crescendo-and-diminuendo in the brass that wasn't in the original score. Now, it's part of the music!

Berg: Last night, I was impressed with the totality of the experience--you and the members of the Ensemble just below the large screen, garbed in black, generating the music, thereby propping up Godfrey's amazing images exploding out at us. In a strange sort of way, it was reminiscent of Fritz Lang's *Metropolis* [1926], with the Ensemble being the subterranean workers, Lang's symbolic "Hands"; the film on the screen the authoritarian agent of control, Lang's symbolic "Brains"; and, the music itself the great mediator Love, Lang's symbolic "Heart," the force of reconciliation.

Glass: That's interesting. Actually, this configuration is something that's going to arise more frequently for me now that I've become generally less interested in concerts since I've done so many over the past twenty years. Now, I'm much more interested in theatrical extensions of the concert form which is why *Koyaanisqatsi* has been so fascinating for me. It's allowed me to get past the concert situation into larger audiences. Now, I'm starting to write works that will be more dramatic and theatrical in nature, works that will include the Ensemble.

Getting back to last night, did we remind you of the people in the new theater who change the sets around, the guys who dress in black and move the props? It's a little like that, though that wasn't intentional. I just happened to notice the other day that it resembled that new theater-like situation. But, we're wearing black mainly because we don't want to distract from the visual emphasis of the film. So there's, let's say, a rather self-effacing look that the Ensemble has. But, as you say, it is at the same time rather striking. You've got the instruments, all the equipment. It's very focused. And behind it you have, in this case, a rather splendid visual presentation.

Berg: Is the collaborative dimension also something that you'll continue to seek out?

Glass: Yes. With my roots in the Living Theater and with John Cage and Merce Cunningham, the group process is very important to me. So I'll continue to look for situations that involve the Ensemble, and situations that result from group visions where group authorship becomes a practical and

comfortable way of working, a concept that's still quite new. *Koyaanisqatsi* is a good example. It's a joint work where the vision came from a group of artists working together, rather than from a single individual. It's a process that's actually quite idealistic, but one that's actually happening, and one that's on the rise.[31]

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Notes

1. Further background on Glass can be found in Glass's own *Music by Philip Glass*, ed. by Robert T. Jones (New York: Harper & Row, 1987), described on the dust jacket as "The Professional Autobiography of the Most Acclaimed American Composer of Our Time," which includes a valuable "Music Catalog" of his compositions, as well as a complete "Discography." Also useful are Allan Kozinn's "Philip Glass," *Ovation* (February 1984): 12-6, and Robert T. Jone's "Philip Glass," in *Musical America*.

2. Concise overviews of cinema's auteur theory, a variant of the great man (and more recently, great woman) approach to historiography which can be found in virtually every area where humankind's endeavors have been chronicled, are presented by Dudley Andrew, "Valuation (of Genres and Auteurs)," in "*Concepts of Film Theory* (New York: Oxford UP, 1984) 107-32; and by Gerald Mast and Marshall Cohen, eds. of *Film Theory and Criticism: Introductory Readings*, 2nd ed. (New York: Oxford UP, 1979) 637-91, whose section on "The Film Artist" includes such important position papers on the auteur theory as Andrew Sarris's "Notes on the Auteur Theory in 1962" (1963), Pauline Kael's "Circles and Squares" (1963), and Peter Wollen's "The Auteur Theory" (1972).

3. Philip Auslander, "Going with the Flow: Performance Art and Mass Culture," *The Drama Review* 33:2 (Summer 1983; T122): 119-36.

4. Auslander 120.

5. Linda Frye Burnham, "High Performance Art, and Me," *The Drama Review* 30:2 (T122) 15-51, cited by Auslander, 122-3. The radically subversive element *vis a vis* mediated mass culture, which Burnham deems as requisite to truly counterhegemonic aesthetic forms, is one which has been vital to the anti-bourgeois, anti-establisment stances of twentieth-century vanguard artists from the European Dadas and Surrealists of the 1920s to, it could be argued, today's popular black rap music groups. Sarane Alexandrian's *Surrealist Art*, trans. Gordon Clough (New York: Praeger Publishers, 1969) and *Surrealism*, ed. Herbert Read (New York: Praeger Publishers, 1971) provide excellent overviews of the basic tenets of and interconnections between the Continental Dadas and Surrealists.

6. Auslander 123, cites Tania Modleski's "The Terror of Pleasure: The Contemporary Horror Film and Postmodern Theory," in *Studies in Entertainment: Critical Approaches to Mass Culture*, ed. Tania Modleski (Bloomington: Indiana UP, 1986), which argues that slasher films are adversarial to the mainstream in their assaults on bourgeois institutions such as the family and the school.

7. See Raymond Williams, *Television: Technology and Cultural Form* (New York: Schocken Books, 1974), cited by Auslander 124.

8. See Andreas Huyssen's *After the Great Divide: Modernism, Mass Culture, Postmodernism* (Bloomington: Indiana UP, 1986), cited by Auslander 133.

9. Auslander 132.

10. Several of the Kurtzweil electronic keyboards used by the Philip Glass Ensemble retail for $65,000 each, for example.

11. The quest for larger audiences is one that Glass discusses freely in the interview. That quest has also been manifest in such Glass projects as his composition of incidental music for

the opening and closing ceremonies for the 1984 Summer Olympics in Los Angeles, as well as his album *Songs from Liquid Days* (CBS Masterworks; 1985), written and performed with lyricist/singers Laurie Anderson, David Byrne, Paul Simon and Suzanne Vega.

12. Among other honors, Glass was selected as *Musical America*'s "1985 Musician of the Year," and featured on the cover of the magazine's 25th anniversary book-length special edition, *Musical America: 1985 International Director of the Performing Arts*. Also, he is the composer of the successful operas *Einstein on the Beach* (1976), *Satyagraha* (1980), *Akhnaten* (1983), *the CIVIL wars: a tree is best measured when it is down* (1984), and most recently, *The Fall of the House of Usher* (1988) and *The Making of the Representative for Planet 8* (1988), based on the novel by Doris Lessing; he also collaborated with Tony award-winning playwright David Henry Hwang and designer Jerome Sirlin for the multimedia theater piece, *1,000 Airplanes on the Roof* (1988).

13. Even though Glass has been described as something of a recluse (see Jones), he nonetheless has appeared on *Saturday Night Live* and *Late Night with David Letterman*, a further indication of his celebrity-hood and, indeed, his acceptance by many popular music and rock fans as well as by devotees of so-called contemporary "serious music." Glass's status as a twentieth-century music top-gun is, however, not without controversy. Jones, for example, notes that Glass's penchants for arpeggiated repetitions and high volume levels of the kind so beloved by aficiandos of rock are such that "Glass's music has been praised and hated, loved and damned, [and] has brought delight and occasioned fulmination. Whether he is a musical messiah or a sonic anti-Christ is a matter of conjecture, but his impact on the world of music cannot be denied."

14. Glass describes *Koyaanisqatsi* as "a reflection on nature, technology and contemporary life, and it uses only images and music, no spoken dialogue, story line or even actors," in *Music by Philip Glass* 203.

15. Michael Dempsey, in "Quatsi Means Life: The Films of Godfrey Reggio," *Film Quarterly* (Spring 1989): 2-12, discusses the ambiguity of *Koyaanisqatsi*'s non-narrative structure *vis a vis* the multiple "readings" elicited by the film among both critics and audiences, a point elaborated upon by Glass himself in the interview.

16. *Koyaanisqatsi* was initially shown in September 1982 at Radio City Music Hall under the auspices of the New York Film Festival and the Film Society of Lincoln Center, largely because noted director Francis Ford Coppola agreed to attach his name to the production as "presenter." It then played at major film festivals in Berlin, Hong Kong, the Soviet Union, Tokyo, Havana, Cannes, Aspen and L.A.'s Filmex, as well as garnering attention through a variety of benefit screenings for different environmental and disarmament groups, before opening around the country in select and limited engagements in the Fall of 1983. The highly effective advertising campaign was directed by Cary Brokaw, who achieved his first notable success with the promotion of *The Rocky Horror Picture Show*. For further information on the selling of *Koyaanisqatsi*, see Karen Kreps, "The Marketing of *Koyaanisqatsi*: Market It? I Can't Even Pronounce It!," *Boxoffice* (December 1983): 68-70.

17. Adam Parfrey in "The Pre-Recorded Audience in Two Dimensions," *Performing Arts Journal* 9:2 & 3 (26/27): 213-8, discusses intertextual relationships between rock concerts and recordings, a situation in which the "original" performance, the live concert or the recording, becomes a matter of individual cases; Parfrey's discussion is expanded upon by Auslander who argues that when a recorded version provides an individual's first exposure to a work, the live performance can be regarded as a reification of the recording since the recorded performance has become the referent of the live one. See Auslander 128. The compact disc edition of Glass's score is available as *Koyaanisqatsi: Original Soundtrack*, Antilles/New Directions 7 90626-2, 1983.

18. "The Grid," a section from Glass's score for *Koyaanisqatsi*, has been performed in concert by the Philip Glass Ensemble since 1985.

19. Two years before its 1987 tour, *Koyaanisqatsi: Live* was presented in two sold-out performances at Avery Fisher Hall in New York City, in part, as a kind of test-run to determine the feasibility of a national road-show production. The 1985 screenings were accompanied by the Philip Glass Ensemble, augmented by the Western Wind vocal group and a number of other musicians approximating the orchestral dimensions of the original soundtrack recording made in 1983. For the national tour of 1987, Glass scaled down the size of his musical group