Hans Haacke
In Conversation with Jeanne Siegel//1971

Jeanne Siegel You have been called a naturalist because of your extensive interest in physical elements, as well as grass, birds, ants and animals.

Hans Haacke [...] When people see the wind stuff or the things I have done with animals, they call me a 'naturalist'. Then they get confused or feel cheated when they discover, for example, my interest in using a computer to conduct a demographic survey. This is inconsistent only for those with a naive understanding of nature – nature being the blue sky, the Rockies, Smokey the Bear. The difference between 'nature' and 'technology' is only that the latter is man-made. The functioning of either one can be described by the same conceptual models, and they both obviously follow the same rules of operation. It also seems that the way social organizations behave is not much different. The world does not break up into neat university departments. It is one supersystem with myriad subsystems, each one more or less affected by all the others.

If you take a grand view, you can divide the world into three or four categories – the physical, biological, the social and behavioural – each of them having interrelations with the others at one point or another. There is no hierarchy. All of them are important for the upkeep of the total system. It could be that there are times when one of these categories interests you more than another. So, for example, I now spend more thought on things in the social field, but simultaneously I am preparing a large water-cycle for the Guggenheim show that uses the peculiarities of the building.

Siegel When did you first become aware of systems theory?

Haacke Sometime in 1965 or 66 I was introduced to the concept of systems. I heard about systems analysis, and the related fields of operational research, cybernetics, etc. The concepts used in these fields seemed to apply to what I had been doing, and there was a useful terminology that seemed to describe it much more succinctly than the terminology that I and other people had been using until then, so I adopted it. But using a new terminology doesn't mean that the work described has changed. A new term is nothing holy, so it can't serve as a union label. On the other hand, a clear terminology can help to stimulate thinking.

Siegel Jack Burnham has had a lot to say about systems and sculpture, yours in particular. When did you first meet him?

Haacke I met Jack in 1962 when we were both isolated from people interested in what we were doing. Since then we have been in contact and have had a very fruitful exchange of ideas. It was Jack who introduced me to systems analysis.

Siegel What is your definition of a system that is also a work of art?

Haacke A system is most generally defined as a grouping of elements subject to a common plan and purpose. These elements or components interact so as to arrive at a joint goal. To separate the elements would be to destroy the system. The term was originally used in the natural sciences for understanding the behaviour of physically interdependent processes. It explained phenomena of directional change, recycling and equilibrium. I believe the term system should be reserved for sculptures in which a transfer of energy, material or information occurs, and which do not depend on perceptual interpretation. I use the word 'systems' exclusively for things that are not systems in terms of perception, but are physical, biological, or social entities which, I believe, are more real than perceptual titillation. [...]

A very important difference between the work of Minimal sculptors and my work is that they were interested in inertness, whereas I was concerned with change. From the beginning the concept of change has been the ideological basis of my work. All the way down there's absolutely nothing static – nothing that does not change, or instigate real change. Most Minimal work disregards change. Things claim to be inert, static, immovably beyond time. But the status quo is an illusion, a dangerous illusion politically. [...]

Siegel Is there any difference in communication between social systems and physical or biological ones?

Haacke For physical or biological processes to take their course, there is no need for the presence of a viewer – unless, as with some participatory works, his physical energy is required (he then becomes an indispensable part of the system's physical environment). However, there is no need for *anybody* to get mentally involved. These systems function on their own, since their operation does not take place in the viewer's mind (naturally this does not prevent a mental or emotional response).

The rigging of a social situation, however, usually follows a different pattern. There the process takes place exclusively in the minds of people. Without participants there is no social set. Take the *MoMA Poll* in last year's 'Information'

show: the work was based on a particular political situation circumscribed by the Indochina War, Nixon's and Rockefeller's involvement in it. MoMA's close ties to both, my own little quarrels with the museum as part of the Art Workers Coalition's activities, and then all the minds of the people who had a stake in this game – the Vietcong as much as the Scarsdale lady on her culture tour to the city. The result of the poll – approximately 2 to 1 against Rockefeller/Nixon and the war – is only the tip of the iceberg. The figures are not quite reliable because MoMA, as usual, did not follow instructions, and the polls have to be taken with a grain of salt.

Emily Genauer gave us a little glimpse of the large base of the work in her review of the show. She wrote: 'One may wonder at the humour (propriety, obviously, is too archaic a concept even to consider) of such poll-taking in a museum founded by the governor's mother, headed now by his brother, and served by himself and other members of his family in important financial and administrative capacities since its founding 40 years ago.' With this little paragraph she provided some of the background for the work that was not intelligible for the politically less-informed visitors of the museum. She also articulated feelings that are shared by the top people at numerous museums. It goes like this: We are the guardians of culture. We honour artists by inviting them to show in *our* museum, we want them to behave like guests; proper, polite and grateful. After all, we have put up the dough for this place.

The energy of information interests me a lot. Information presented at the right time and in the right place can be potentially very powerful. It can affect the general social fabric.

Such things go beyond established high culture as it has been perpetrated by a taste-directed art industry. Of course I don't believe that artists really wield any significant power. At best, one can focus attention. But every little bit helps. In concert with other people's activities outside the art scene, maybe the social climate of society can be changed. Anyway, when you work with the 'real stuff' you have to think about potential consequences. A lot of things would never enter the decision-making process if one worked with symbolic representations that have to be weighed carefully. If you work with real-time systems, well, you probably go beyond Duchamp's position. Real-time systems are double agents. They might run under the heading 'art', but this culturization does not prevent them from operating as normal. The *MoMA Poll* had even more energy in the museum than it would have had in the street – real socio-political energy, not awe-inspiring symbolism. [...]

Hans Haacke and Jeanne Siegel, extracts from 'An Interview with Hans Haacke', *Arts* magazine, vol. 45, no. 7 (May 1971) 18–21.

Edward A. Shanken
Reprogramming Systems Aesthetics//2009–14

As the cult of high modernism tumbled from its lofty throne, the scientific theories of Claude Shannon, Norbert Wiener and Ludwig von Bertalanffy gained substantial purchase in the arts. Radically opposed to the romantic emotionality of expressionism, Abraham Moles and Max Bense's theories of 'information aesthetics', Roy Ascott's cybernetic art theories and Jack Burnham's 'systems aesthetics' became influential models for more rational approaches to making and understanding art. Losing their lustre by the mid 1970s, they disappeared from art discourses for nearly two decades, apparently gathering dust but, as recent affairs suggest, also gathering steam. Historical and critical writing addressing these aesthetic theories began to emerge in the 1990s and accelerated in the 2000s, when a number of exhibitions and symposia were devoted to related themes (including a 'Systems Art' symposium at the Whitechapel Gallery in 2007). Specialized scholarly publications also mushroomed in the 2000s, including Francis Halsall's *Systems of Art* (2008). Paralleling the entry of this historical recuperation into museum contexts, scholarly writing on the subject has entered into more mainstream academic discourses, including Pamela Lee's *Chronophobia* (MIT Press, 2004) and the celebration of Burnham's work in the fiftieth anniversary issue of *Artforum* in 2012. To borrow a line from Hans Haacke's proposed 1971 work ironically dedicated to Wiener and resuscitated by scholar Luke Skrebowski: 'All Systems Go!'[1]

Contemporary discourses surrounding systems aesthetics, however, tend to lack an appreciation of the alternate art histories that emerged around informational, cybernetic and systems approaches to art. Charlie Gere identifies early conceptions of systems thinking and computation applied to art in the Independent Group's exhibition catalogue for *This is Tomorrow* (Whitechapel Gallery, 1956) and notes John McHale's 1962 pronouncement that 'the future of art seems no longer to lie with the creation of enduring masterworks but with defining alternative cultural strategies, through a series of communicative gestures in multi-media forms'.[2] Roy Ascott wrote about the application of cybernetics to art in 1963, proposed human-machine symbiosis as art in 1964, anticipated remote interdisciplinary collaborations involving artists in 1966–67, and in 1967 proclaimed, 'When art is a form of behaviour, software predominates over hardware in the creative sphere. Process replaces product in importance, just as system supersedes structure', all foundations undergirding his subsequent praxis of telematic art.[3] In 2006 [in *Materializing New Media*] Anna Munster proposed