



With the emergence —and current ubiquity—of *video-conferencing* it is clear that [Claude Shannon](#)'s model of *communication* has become obsolete. The *mathematical* understanding on the factors that affect the accuracy of a signal, bandwidth, channel and decryption *may* still be *correct*.

But not his understanding of communication, in which the communicators **A** and **B** are located at each extremity of the channel. In a video-conference the participants are gathered in a broadcast-location: a between-space **X** which is essentially a *non-site* in Robert Smithson's sense of that term.

As a structural framework for crowd-sourcing it has become clear that video conferencing is a *structuring* structure. The reduced quality of sound and image imposes shaping constraints on *how* and *what* it is possible to say. Like a *megaphone*. It impacts directly the content/container relation.



The audio-visual restrictions of video-conferencing provides the medium with a kind of retro-future charm. The ideas of local TV from the 60s, the early video-movement in art, and [radical software](#). With the functional tethering of the technology to the idea of *broadcasting*, this is enhanced.

When used in isolation the media has therefore its own cultural validity claims. However, when mixed with other communicative affordances, such as physical space, video-conference reveals a rather poor affordances for developing synergies. In isolation it is tiresome; in hybrid mixes useless.

If the laptop is abandoned, camera versatility and resolution can be fixed by using an iPad and a mobile. This is because the camera functions are articulate an integrated, and that they are not frontally organised like a laptop. They also have a *backside* (and a 360° *rotational* perimeter).

So, although they are multi-functional—and form does *not* follow function—they have object-qualities and functions depending on *where* and *how* you *dock* them. They are *bodies* in the sense of *vessels*. Which makes it more obvious that we can require them to enter into *hybrid* relations with *space*.

With *sound* the space-mix is more complicated: first there is the problem of *feedback* if there are more than one computer in the same room. When distance is sufficient it kind of works, but the sound transmission is asynchronous and echoes. Mic'ed up and amplified it is a new chapter.

You need two computer units—e.g. an iPad and a mobile—and split the sound: **a)** sound OUT from the space via a microphone; **b)** sound IN from the remote participants via a loudspeaker. Sound OUT/IN can be integrated in a sound card, but still the feedback has to be solved. *Present* conditions.

One would assume that the problem could have been solved as a multi/sited podcast with both microphone and loudspeaker integrated in *each* client (which would solve at least part of the feedback problem). But the *discussions* of this problem on the web, show that this is not how it is.

This might be because the businesses want us to buy more expensive video telecon systems where sound and image are better (and integrated). So, any cheaper solution will be *ad hoc* and *hacked* at this present time. If this is a problem that can be solved at the level of the *software*, it is interesting.

Because it is a question of bidirectional sound as in phones and gaming. So, this is an aspect that has to do with *ethics* and *impact*: deeply ingrained with business models and human greed. It is also ideological in the sense that Zoom-conferencing is not intended for several users in a shared space.

The *liberating* impact and *enhanced* learning that could take place with spatial integration is not taken into consideration by the business: this discussion is based on experiences to innovate the usership of Zoom. To enhance and develop usership you have to work against technology.