

ORON CATTS

Director of Symbiotica, The Centre of Excellence in Biological Arts School of Anatomy and Human Biology
Mailbag M309 The University of Western Australia.

<http://www.symbiotica.uwa.edu.au/>

My name is Oron Catts I'm the director of [Symbiotica](#) which is called now the centre of Excellence in Biological arts at the University of Western Australia. [Symbiotica](#) is a Research Lab where artists can come and work with biologists, and work with life in general. We were established in 2000 since then we have been having more than 70 research residences, mainly artist but we also have people from the social sciences, art historians, political scientists, and we increasingly have now designers and architects as well coming in. Beside the residence program we also run an academic program, postgraduate courses, masters and we offer PhDs. What we offer is a very unique access to the expertise of the life sciences and mainly the laboratories. The research model that we developed in [Symbiotica](#) involves the idea of artists coming and be mentored by scientist to develop his projects for them to acquire the skills, and then the artists keep pursuing the research themselves and get the needed technical and scientific skills for the project.

Grid_Spinoza: Are you part of the University?

Oron Catts: We are basically part of the University developing the model of being a research Laboratory within a biological science department, we are based in the School of Anatomy and Human Biology at the University of Western Australia. And in order to be able to be seen as a valid research group in the school we basically emulated the model of the scientific laboratory, although not completely because it's supposed that scientific labs people pursue researches that is being directed by the head of the lab, what we have is basically a situation where the artists nominate and develop their own project, and what we do is provide them the support they need. For being part of the science department position as a research lab in a science department all of our researchers need to clear their projects through the ethics committee and health and safety committee.

GS: can you explain some of your the projects?

OC: Besides running the research centre I also have my own research projects since 1996, and actually the model that I have running myself developed as an artist in residence in that school in 1996 was what influenced the development of the whole research lab. And our research projects consist in the use of living tissue, and in the use of tissue technologies as a medium for artistic expression, so is an ongoing open research project looking at the ways in which living tissue can be used for artistic practices, ranging from creating symbolic sculptures using living tissue to what refers to pseudo utilitarian projects like the grow of meat and leather using in vitral techniques. Then we have artists working with molecular biology, for example, we had an American artist called [Paul Vanouse](#), who developed a project using gel for electrophoresis to generate recognisable images, he developed a very complex system in a software to enable in to do it, as well as the practices of working with DNA signs and all of the other techniques that he needed. We had artists working with bacteria in different ways, we had artist working with viruses, artist working with fungus. As well as we are now involved [in a large scale ecological project](#) which is based around a lake in south of Mandurah in Western Australia, which is one of the last remaining colonies of this very ancient organisms called thrombolites, and now this lake is being threaten by human development and global warming, and we are looking at in array of different projects surrounding that lake. So if you look at the ten last years of the history of Symbiotica you can see a really wide ranging approach to questions concerning life and I supposed we covered all of this areas

GS: What is your definition of life?

OC: Most of the projects are dealing with that question, not so much about what the definition of life is but really what it means to treat life as a raw material for the production of human products if you like, or this idea of looking at life from an engineering stand point. And I think my own interest is looking at the issues

concerning what happens to life when it's becoming a raw material. I have a keen interest in understanding what happens to life when we start to treat it as raw material, how that's going to change how we perceive life, the way we relate to life all range from the most basic life to human life. I supposed in a sense we live in a time now in which our cultural perception of life or our biological perception of life, or the way we evolve to perceive life is in conflict or at least in a very strong tension with what we know about life, but even more importantly what we chose to do to life with technology, and I think we can't leave this area unscrutinized as artists revealing to be engaged with these questions and open up an area for artistic and culture exploration in to these very questions.

GS: One of the statements in your website is: SymbioticA encourages better understanding and articulation of cultural ideas around scientific knowledge and informed critique of the ethical and cultural issues of life manipulation. How are these issues and how do you deal with them?

OC: Dealing with issues concerning the manipulation of life can be approached in many different ways, the model that we developed, we don't think that's the only one although, but we are able to negotiate a very privileged, I supposed, position where we get artists to engage intimately with the processes of the manipulation of life, they are going to the lab and they do it themselves. That results in two very interesting things: one is that the artists start implicating within the whole process, so the critique that they are engaging with, needs to be more in recognition with the fact that they are part of this whole project so they can't wash their hands, they can't say this is wrong, they need to find ways to articulate it. The other thing is obviously by doing so you also become much more knowledgeable and much more aware of the new answers that involved in this whole area, which means that the projects are much more complex, can never be black or white, they can't be one line statements, they actually force the artists to be engaged in much more informed the newswiest way with these very questions, and by that allow us a new voice and another approach to the very same problems, the very same issues that the artists are dealing

GS: This kind of projects open a whole new grant for artistic research, to what extent scientific methodologies are kind of seeping in or away in to this field?

OC: In regard to validation, obviously as artists we have other ways to validating our work, although it's actually never discussed on these ways of, it's more like a peer reviewed process, you know the way scientists validate their work is by publishing the research in a peer research journal, the way artists validate their work is by being selected by other peers or curators to show their work, by publishing within more specialised artistic publications or more general cultural publications. We need to use this in a way also to validate the output of our research in the eyes of colleagues in the science department. We are very much part of the culture of publishing and creating some form of outlet for a research. And I supposed we are fortunate enough to work in a field that when we started, ten years ago, was not very recognised but through the years our work is being validated in many different kind of cultural forms to such an extent the University recognised as a valid output. Now the two things I am concerned also, in the sense that don't want artists to come and feel that by working in a science department they can validate scientifically their work, that's not true, and at the very same time I don't want that the artists would validate the scientific work by making it look acceptable our work is not science communication, it's not about creating public acceptance to the scientific processes, to the scientific findings that we are engaged with. Our work is to create a platform where artists can understand and be engaged logically and critically those notions. We have 70 researchers, we have quite a few projects, some of the projects actually resulted in what I would refer through a collaboration with artists and scientists where some of the works prove to be engaging in a way that was scientifically valid and artistically engaging, but I would say that this is the minority of the works, and that's not really our aim. We are not really interested in what I refer the secondary outcome of the research. I don't believe that art should have any agenda, besides their own agenda,

GS: How is the relationship between the artists and the scientist, how they share methodologies?

OC: It's interesting because we have quite a few researchers, we have 70 researchers, and each one of them will follow almost a different model, some of them are really really good when they present scientific protocols, when they are working with scientists, some work very closely approaching to these processes, other people are more open to intuitive research if you like, but both ways are ok. We try not to subscribe a methodology to a residence what we want them to do is to follow through the projects in a sense that being

involved in the laboratory work their bodies would be engaged in the process, is this idea of experiential engagement, the idea of if an artist wants to work with tissue for example or with other kinds of organisms they have to experience the actual process of doing so, the way they experience, the way they choose both to articulate the process and the outcome is really up to them. For example, for the last 25 years I've been working with tissue, my own work with tissue is most close to this idea of cooking, that once you know what ingredients you have and what ingredients work together you can be more interactive in the way you mix them. And tissue is supposed to add other forms of biological research, it's more open than when you work with molecular biology, which is more harder, tissue is much more flexible, tissue is much more complex living system that gives you more ways to play with if you like. But molecular biology is much more striker in regard to how can you play with the ingredients. So different areas of research, different approaches are all welcome.

GS: You are talking about validation, but which systems of internal evaluation do you have?

OC: Systems of evaluation in Symbiotica are quite interesting in the sense that first of all when we need to evaluate the application -we get more artist that want to come to work with us than we can accommodate so obviously we need to exercise some kind of evaluation criteria- and we try to make the selection criteria based on of how will people are going to use the resources that we are making available for them. So again, I'm not trying to be prescriptive but If someone wants to look down in the microscope or if someone wants to use images, or someone wants to do things that either are done without the access that we provide we just are not interested in that. We also are not interested in artist coming and trying to validate some research done before some kind of in approach. But when artist are coming or when researchers are coming to the lab, the very first thing I tell them is that if they are going to came out with exactly what they proposed I would say it is a failed residency. Because they learn nothing. So in a sense the evaluation is actually based in how much their learn how much their achieve. We framed ourselves as a research laboratory we don't have exhibitions in our residence program, we are not pushing our residents to create anything, any outcomes. Many of them will outcome but it's not something that we are pushing or aiming for, we want them to be able to concentrate for a few months in this idea of pure research, without the pressure of need to produce anything. We don't have forms of evaluation because then it's really up to them and some of the artist. Now, having ten years of history of Symbiotica, I can see artist that came with nothing in the end of the process, but you can see how this period of intensive research time actually influenced their practice, and how it change the trajectory of the work to unexpected places so I would be very doubtful if you can actually evaluate those types of research residency and research projects straight after the projects ends, it actually needs to give time and need to see how this experience influences people's professional practices.

GS: In artistic practices usually the output is the work, but to some degree we are talking about process of learning, how can you facilitate this knowledge transfer?

OC: You compare the way people talk and engaged with issues when they just arrive to Symbiotica and when their leave. And having the experience of hosting 70 people I can see a patron, not all of them are going to respect that, but I can see a patron that I can predict what it goes. One of the interesting things it's that it seems that almost all of our residence after 5 or 6 weeks into the residency have this existential crisis , then we know that It's kind of working, they are going to this knowledge transfer, all this information that we have been bombarding with they just reach a stage where they are completely lost, and I think it's a very important stage for them to be in and it takes a few weeks for them to find a recess. If they don't have this existential crisis they block themselves to the new knowledge, so that's my way to evaluate that.

GS: How can be applied the concept of failure in all this processes?

OC: Failure I think it's a very important think in the context of art. I think as an artists we are in a very privileged position being one of a very few position that has a license to fail, I think that this artistic failure to a logic sense is much more important, or at least the failure of the project in the sense of either engaging, quite a lot of my own work actually deals with planed failure, so we plan, and that's when you engaged with kind of the critique of science. I think it's also quite important to be in a position where actually you setup situations which are doom to fail in a practical way because art is not practical in that sense. I think expecting art to provide utilitarian solutions is the wrong think to do, so art can engaged with the notion of failure and be very successful in doing so. In regard to failing of the research residencies it's a really hard one to assess,

because anyone who goes through this intensive time they are being changed in a way, you can't unlearn what you went through, the process of being in a laboratory engaging with all of these issues but also engaging with these experiences these bodily experiences of having your body in a laboratory following those pursuits, doing those things it can never be considered to be a failure,. What people choose to do with it is their issue but I would say that out of the 70 residency that we had, maybe 3 or 4, where someone came out of it and said "it was a waste of time". Well actually I think that nobody said that it was a waste of time, but you know, they felt that they didn't succeed, but then talking with them some years after the trial they in retrospect they said I'm happy that I have done it, that went through. So I'm not saying that there is no failure, I'm saying that it really depends on how you define the failure, and if what you do from the very beginning, is doing what I'm doing and saying there is no fail because the only failure is to do exactly what you planned, that really opens up the possibility of experiencing and having this very intense time.

GS: one of the notions that we are interested in this project is the notion of discarded projects, how do you work with it?

OC: Discarded projects are, I would say we have a fair sharing of those, and projects that kind of fail in different stages of the development as well. Everything from the idea that an artist comes and starts developing a project and then goes to the whole process of applying for the right clearances and realizing there is no chance of being allowed, just the process of doing that and articulating it and understanding those kind of blocks to continue in the project are really important because then you start to second-guess them and understand how can you go about things differently. When you work with biological systems often they behave in ways that are unpredictable and also you can experiment when you work with living systems that it dies on you, or being contaminated or something else happens, and again, it can be considered to be a failure or it can be considered something that in many cases because of the timeframe of the residences, artists realize there is no way they can be replicated, there is no way they can start again doing that, but again, this notion of informing professional practices that development is the important part of what we're trying to do, so we try to maintain a kind of a data base of all of the projects, the artists are constantly contributing to that and the idea of Symbiotica is based on the idea that artist research is built up on the research of previous residence, we're not interested in territorial artists we're interested in artists that are really open to share with their colleagues, so we recruit them to provide with some information regarding that, and also be open to be accessed later on by a residence, and that's how they learn a lot and that's how that works. And out of the 70 residences that we had, we had maybe problems with four territorial artists that didn't want to share what they were doing, and obviously very quickly reveals that Symbiotica is not really the place for them to do a research.

GS: You were talking about blockages, you have the science limits, you have the laws and regulation limits, and then you got your own limitation, like how much do you want to risk...which is the main limitation?

OC: It's a combination, but we have found that the main block is time, and the way that our residence program operates is that the artist has to generate their own funds, we actually charge them a bench fee to support their research so they are limited by how much money they have generated, how much time can they afford coming to Symbiotica, in many, many cases you would see that in the last weeks of their residency they are kind of nailed what they want to do but they realize they can't pursue it, because when you work with biological systems things take quite a lot of time.. so time is the major block. But then, there are other blocks like institutional, and getting the right clearances, most of the projects that we wanted to do we aren't able to get the health and ethics clearances, it requires quite a lot of time and quite a big effort to push all these things through.

GS: Artists are well known to try to work individual in this traditional view of the artist, but all these processes that we are talking about need a high level of cooperation, how do you deal with that?

OC: We develop quite a few different methods to deal with that, when we started we were kind of trying to engage with it in a much more kind of almost a collective, but this idea of having this flat hierarchy where everyone is credited I think that it's interesting because in the sciences when a scientist publishes a paper usually will have a few co-authors that will involve the technicians working with him, when we tried to do with artistic projects we realized that there was a block that came from institutions and curators, they don't recognize that fact, they still live with the idea of the individual genius artist, and many of the artists as you

mention, also come with this attitude and individual pursuit, so we recognise this reality. In the last three years we get extra funding, that actually allows us to pay scientists to mentor the artists, the artists is engaging with the scientist but more in a level in which the scientist transfers his knowledge of how to do things and then the artist applies this knowledge to his own projects, and this way the scientist is happy to have an extra income and the artist can claim the ownership over the work, without feeling bad that the scientist is not recognised. In many cases is not even up to the artist the way their work is then being presented when there is such a tradition of not recognising artistic work as a collective work.

GS: When you are dealing with living tissue is it intellectual property or industrial property?

OC: What we are trying to do is basically neither, some interesting work it has been done with copyright... I think first of all I think life is a special material but It can still be considered legally as a material, I don't think that any artist should claim that they have ownership over a material, so if anyone wants grown their own version of pig wings for example, use pig tissue to grown pig objects, I can't claim ownership over it, we have done it but if anybody else want to do it would look different, even to such an extend to stuff that can be seen like a discovery like the development of leather when we use techniques and applied in a new way, like when we grown victimless leather we are not interested in claiming ownership about that. So what we have done is that when we exhibited the process was open so anyone who wants to grow leather in such a way can actually do it, and what I hope It would happen is that no one would be able to claim ownership about that because we create what its considered peer art, so it's art in the public domain so if anyone wants to use the processes they are welcome to do it. The property of biological material is an extremely problematic area anyway and many of the artists are engaged with that. If we were in a apposition I will say we will position in a place that would be extremely problematic for us, so I would rather allow knowledge to be open and allow this processes to be open.