

# ENGLISH SUMMARY

## The immaterial kunsthalle

### Susan Bolgar

Head, Unit for Production in the Arts and Culture, Jönköping Municipality

Prior to starting the two-year Konsthall Jönköping art programme, we asked ourselves what a kunsthalle actually is. What is most important – the art or the building?

This programme is a result of a decision taken by the municipal Committee for Arts and Culture in the spring of 2014. It states that “Activities must highlight contemporary art that provokes debate. This art must touch on people’s lives and broaden social debate. [...] The project must involve new technology and new ways of working with art.” The aim was to practically investigate the potential for conducting contemporary art activities of national and international relevance, without a permanent building. At the end of the project, a model – a handbook – for how such a work should be organised will be developed.

Instead of visitors coming to the gallery, the gallery has come to the visitors at different sites around Jönköping. It is now possible to visit Konsthall Jönköping in the beautiful landscapes just outside the city. On an autumn day we can stand together on the edge of a field and listen to its song – *The Background Noise of the World*.

## Make some Green Noise

### Linda Wallenberg

Curator, Linda Wallenberg konst

Landscape. Artist. *Green Noise* is a landscape study; Johanna Byström Sims works in the field, but her working process and tools are entirely different

to those of traditional landscape painting. Her recurring interest in working with sound and technology finds a coherent expression in *Green Noise*.

The colour green. Agriculture. Work in the fields is an important part of farmers’ lives and their contemporary tools are computers, GPS, satellites and infra-red sensors.

The cultivated landscape. The fine arts. The word culture has various meanings and they are integrated in *Green Noise*. As Konsthall Jönköping leaves the urban environment and moves both the production process and exhibition space to the countryside, new opportunities are created for interesting partnerships and new spaces are opened up to the audience.

*The Background Noise of the World. Reflectance of Green*. Both artworks are part of *Green Noise*. In *Reflectance of Green*, we approach landscape painting. But this is neither painting nor film in their traditional meaning. It is a digital painting. On one unique occasion we have the chance to experience the sound piece *The Background Noise of the World* while the farmer works on his fields. We are in the field with the artist. We experience the artwork as it is created.

## Green Noise

The artwork uses a piece of technical equipment, the Yara N-Sensor, which is used in agriculture. It is mounted on a tractor and has sensors that read the crops’ green colour, so adjusting the amount of fertiliser that is spread on the field in realtime. The right amount is good for our environment.

In *The Background Noise of the World*, Johanna Byström Sims has recorded various tones using her own voice. One tone is equivalent to one green shade on the field. The sound files are then governed by the sensors, so the composition is created in realtime as the tractor drives across the field. The voice sings the green of the crops.

*Reflectance of Green* is a digital artwork that uses the recording of the field’s green colour from the performance of *The Background Noise of the*

*World.* The recording steers a palette of varying shades of green. This artwork is shown as a projection on a wall or film screen: a new moving image of the field, a pixel-like pattern reminiscent of grasses swaying in the wind.

## **An exciting time for agriculture**

Stina Olofsson  
Project Manager, Focus on Nutrients, Swedish Board of Agriculture

It's not really all that long since Sweden was an agricultural country, but increasing numbers of people now live in urban centres, without any contact with agriculture, and knowledge about how food is produced is declining.

Historically, technological developments in agriculture have played a vital role in society's development. Think about when the plough was introduced, or potatoes or clover, and when fields began to be drained. These things brought about great changes in both food production and the landscape.

### **Demands for reduced environmental impact**

But what's the situation now? Technology continues to develop and, in parallel, there is great societal pressure to have thriving, sustainable agriculture with a low environmental impact. These two trends can be combined.

Nitrogen and phosphorus that leach from fields contribute to the eutrophication of the Baltic Sea, and nitrous oxide that is released to the air affects the climate and global warming. Swedish farmers are aware of this and are therefore working hard to reduce the amount of fertiliser washed out of the agricultural cycle.

### **Successful voluntary measures**

Focus on Nutrients (Greppa Näringen) is a campaign in which farmers and public authorities are voluntarily working together to combine profitable production with environmental protection. Statistics from the farms that received regular advisory services from 2001 to 2013, show that the release

of nitrogen to water and air has been significantly reduced: an annual reduction of 800 tonnes in leached nitrogen and 700 fewer tonnes of nitrogen, in the form of ammonia, released into the air. This means that the actions taken by farmers are making an effective contribution to reducing agriculture's environmental impact.

### **The right amount of nitrogen in the right place at the right time**

The *Green Noise* art project makes fascinating use of a nitrogen sensor. Nitrogen is essential for growing crops and is added to the fields through fertiliser. Every farmer knows that different areas of a field have different growth rates, which also means that these areas have different nitrogen requirements. In other words, a field needs fertilising with right amount of nitrogen in the right place. The crop will be of poor quality if it gets too little nitrogen, but if too much is added there's a risk that it will leach into nearby watercourses and lakes and cause eutrophication.

Farmers therefore use advanced and easily available technology, such as GPS and auto control, when working in the fields. Tractor-mounted sensors that read the crops' nitrogen requirements are being sold like never before, and many parties are working together to promote development.

### **Nitrogen sensors, satellites and drones**

Focus on Nutrients also uses this new technology, and makes precise measurements of nitrogen uptake in wheat using a handheld nitrogen sensor. These results are published in Focus on Nutrients newsletter and in reports on the internet. Using these, advisors and farmers can determine the amount of nitrogen they should add to the crops. Another example of new applications is the use of satellite images. Maps are published on the internet via a partnership between a number of agricultural stakeholders, including the Swedish University of Agricultural Sciences. Based on satellite images, the maps show vegetation indexes and crop variation across fields, helping the farmer to add the right amount of fertiliser in the right place.

But development doesn't stop here – perhaps drones could be used in the future? What level of

precision is most cost-effective? These are the issues that we're now thinking about.

### **Farming is a leading edge industry**

The *Green Noise* art project showcases how interesting farming and cultivating crops can be. The industry is developing new technologies for use in new combinations, all based on nature's variations. It puts a finger on how technological advances in agriculture are still hugely significant for society's development. Imagination is the only limit to how art and agriculture can be part of – and promote – a sustainable society!

Focus on Nutrients is an information and advisory services project for environmental and climate measures within the Swedish Rural Development Programme. It is a joint venture between the Swedish Board of Agriculture, the Federation of Swedish Farmers, the County Administrative Boards and consultancy companies.

### **With the frequency set to green**

Niklas Östholm  
Independent Curator, Writer and Curator at  
Folkrorelsernas Konstfrämjande

One afternoon in September, Johanna Byström Sims, Linda Wallenberg and Niklas Östholm, Curator and Writer, met at Johanna's home. Their discussion was recorded and is available in its entirety as a podcast at [konsthalljonkoping.se](http://konsthalljonkoping.se)

### **Let's start from the beginning. When was the seed of Green Noise sown? Linda Wallenberg, as curator, why did you approach the artist, Johanna Byström Sims?**

Linda: Konsthall Jönköping invited me to do a project. It's a mobile kunsthalle. At that point all of their projects had been in the city of Jönköping, so I thought it would be interesting to do something in the countryside. But it really began two or three years earlier. Myself, Johanna and a farmer, Henrik Wallenberg, were working on a pilot study when

Johanna came up with the idea for *The Background Noise of the World*, one of the artworks in *Green Noise*. It had been lying there, waiting. Now the chance was there and so I called Johanna.

### **Johanna, how did you respond to the invitation?**

Johanna: I've thought about the idea for a long time, and to actually have the opportunity to do it was great. It was interesting to be able to work outside the white box, in places where art isn't usually exhibited. And to be able to work with people who aren't usually found in the art world, such as farmers.

### **And now it's happening. What challenges or difficulties have you faced?**

Johanna: Being so dependent on the weather, like farmers are, that's been difficult. When we plan a test run on a particular date, the weather decides whether we can do it or not. In other words, we can't plan exactly, we always have to have both a plan A and a plan B. Sometimes I've forgotten this during the process, but I'm immediately reminded when I meet the farmers. You have to remember who you're working with – and that's inspiring and fun. It puts me off balance, in a good way.

### **So it's been cooperating with the weather, rather than the technology, that's been the challenge?**

Johanna: The technology is also difficult, but interesting. I get good support from the programmers.

Linda: The digital components simply have to work. The data that's recorded – and which we hear in the sound art – is translated to moving images. This must be done in one day. Then it will be installed as a projected film on the wall, and shown to an audience. We've done quite a lot of testing to make it work.

### **Johanna, why did you choose your own voice?**

Johanna: I often use my own voice in my sound art. It's closest at hand and becomes a type of self-portrait. But a voice is also analogue, a counter-balance to the technology.

### **How much of the technology does the viewer need to understand?**

Johanna and Linda: All of it... (laughter).

Johanna: No, nothing really. I see it as being an ex-

perience of sound moving through the landscape, across the fields and towards the forests. But if you know about the sensors that read the field, then you hear and see the piece in another light.

Linda: The piece is experienced differently depending on your prior knowledge. For example, a farmer is very knowledgeable about the technology behind it. That's always the way when you experience art, you're influenced by your own background. It's been exciting to watch the various types of expertise meet during the work on these pieces.

### **What's it been like, working with Järstorps Prästgård and Hans Lundberg?**

Linda: Genuine interest from the start. We've had fantastic luck that we got on so well from the very beginning. And Hans Lundberg thinks that it's rewarding to demonstrate how modern agriculture works.

### **How has he shown an interest in the art, for your work?**

Johanna: It's been practical. I often work practically. We've both been interested in making progress.

Linda: You learn about art by working with it. There's a drive there – for us art professionals too – in continually discovering something about what we work with. This often happens when we encounter other professional worlds. We meet in the doing, the making.

### **Modern technology is something you can gather around?**

Linda: Exactly, it's not only agriculture working with new technology. Johanna isn't the type of artist who approaches the landscape with a canvas and brush. This project brings about an understanding that the artist's tools are different today.

### **So far, has it gone as you've intended?**

Johanna: The process itself feels great. But after that I have no idea, even if we do tests we'll just have to see how it goes.

### **What do you mean? What could influence how it turns out?**

Johanna: For example, I can't control the order of

the sounds. What if this field makes them pretty monotonous? It's not a failure, but it's good if something happens in the sound image.

**For me, part of the artistic process is not really knowing how it's going to turn out. Uncertainty makes the art valuable. We can learn things by seeing the world around us in new ways. Of course we know that nature is dominated by different shades of green – I know that too. But it's still fascinating that *Green Noise* makes me think harder about green as a colour and its shades in nature. Has your experience of the colour green changed because of *Green Noise*?**

Johanna: Personally, working with colour has been interesting because I've almost never done so. This has been my first art work to focus on colour, so it was nice to focus on a single one. The first thing I did was to check which sound frequency could be the equivalent of green. I'm interested in how to break down the boundaries between different sensory impressions, and that it's in some way possible to hear colour.

### **That you associate a particular sound with a colour?**

Johanna: Yes, I've looked at various older theories. It's interested people for many, many years. Aristoteles has written about it. But my experience of the green out on the field was very intense. Sure, like you say, we see it everywhere. It's incredibly beautiful when you focus on it. It almost takes your breath away.

Art gives this to us, an experience that we take with us and which means that – even in other contexts – we experience the colour green, nature and the landscape more intensely.

Linda: I travel by train a lot and experience the landscape that way. And I've carried the project with me on those trips. Culture as the cultivated landscape and culture as art, they suddenly fit together. What I see is something new, something special, that arises out of them together.