



Talescape

Michiel and the tale of an
it-can-be-everything-you-want-it-to-be
locative media API

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“He’s a social nerd” — that’s what I thought when I first met Michiel at a faculty dinner two years ago. Michiel is one of those PhD students whose work is so unrelated to what I do, that it is difficult to find common ground. At the same time, he is so social, that you’ll easily talk to him nonetheless. When we ran into each other at lunch, we used to practice our small talk skills and discuss bad weather, new gadgets and canteen food. However, this has changed a while ago. While continuing his PhD by day, Michiel has been working in my field of expertise at night. His latest project, Talescape, is what he calls a *“locative media platform”*. The first idea he is deploying on the platform is what I’d call an *“Audio Augmented Reality Application”*. While we have lunch, he tells me more about his new endeavors.

“Talescape is a service, a platform, an API (Application Programming Interface) that allows you to develop anything that connects audio to certain locations.” Although this sounds rather abstract, Michiel has plenty of concrete ideas for services that could be created with the API. *“With Talescape, you can develop anything ranging from audio-based city guides for tourists, way-finding services, silent disco’s on the beach, real world adventure games to location-based advertisement and experimental audio walks.”* As diverse as this might sound, it basically comes down to a person moving through space with their mobile phone in their pocket and their earplugs in their ears. Depending on their current position (mostly GPS coordinates received by their phone), they hear different audio content.

“Talescape is a platform that allows you to develop anything that connects audio to certain locations.”

Talescape’s focus on audio is one of the aspects that sets it apart from existing augmented reality services. *“Many mobile apps, such as Layar, focus on the visual sense and display location-specific information like nearby restaurants, ATMs and*

historical locations. But I find it inconvenient to be forced to look at my phone while walking outside. We want to allow users to be able to look at something while they learn about it — to experience where they are in full context.” But if we are honest, we have also heard about GPS based audio walks for tourists before. In fact, many of the ideas Michiel mentions aren’t particularly new. What’s new is the idea of a platform that allows the general public to create these experiences themselves. The primary goal of Michiel and the team behind Talescape, is to create a platform that is so simple that parents can use it to design a treasure hunt game for their kid’s birthday party, but at the same time flexible enough for companies to develop diverse commercial applications with it.

Actually, the platform is intended to be so flexible that it is more easily described by what it can *not* do: *“Talescape can be anything you want it to be. For example, while we’re currently focusing on audio, the platform will not be limited to it. You could use it to send yourself reminders to buy groceries when you are near the supermarket, or update your Facebook status automatically when you arrive at work. The only thing it probably shouldn’t be used for is security and authentication. Having your home’s door unlock automatically when Talescape thinks you’ve arrived there is not the best idea. Nor can a Talescape application prove that someone is really where they claim to be, because the GPS data from a smartphone can be faked, if you have the know-how. Other than that, the sky’s the limit. It is also flexible in terms of hardware: It runs in the browser of any modern smartphone or tablet. And*

when Google thinks our little country is ready for Glass, it will run on that too.”

Something else that makes Talescape special is that the end-users (those who walk the streets with their phone) can not only receive location-based content but also create and upload their own content. *“One application we are focusing on is storytelling. Imagine walking the streets and being reminded of*

a story about your surroundings. How great would it be if you could simply use your phone to record the story and share it at that particular spot? Our plan is to make this possible. Once the story is shared, other users who walk through the area can listen to it, rate it up or down and even record

the Startup Weekend in Enschede. When I arrived there, I was expecting dual screens and quad-core computers, ready for long-night coding sessions.” Instead, Michiel was surprised to find a much more business-oriented event where participants pitched their ideas and developed concepts rather



their own response. Of course, this is not a substitute for the experience of walking around with a local expert and hearing the story of your surroundings firsthand, but we believe it is the next best thing.”

Interestingly, it is this storytelling idea that initiated the Talescape project in the first place. *“I wouldn’t be working on Talescape if it wasn’t for*

than software. Among the other participants was Lissa Kooijman. *“Lissa presented an idea for a social platform and GPS based storytelling app called ‘Moving Story’. It caught my attention and I joined her team.”* This turned out to be a smart move. *“After 54 hours of expanding and developing the concept, the jury was convinced by the mobile app’s potential and our eight-person team was awarded first prize.”*

Since the event, the storytelling project has grown into a general-purpose locative media API. The team-size, however, has shrunk. By now, only three of the original members are still on board. *"My team members have expertise in finance and business, and I'm the developer. We still believe in the original idea. But we were faced with a chicken-and-egg problem: People will, understandably, only want to share their experiences on a platform that already has people listening, and potential listeners will only go where there are already stories to be heard. That's why we decided to start out with an application that provides interesting content right away."*

For Michiel, working on the Dam Square Experience is a rewarding first project. *"By creating the application, we learn a lot about our platform. One of the biggest challenges with creating actual applications is acquiring high quality content. Fortunately, Professor Dr. Karin Bijsterveld and the "Soundscapes of the Urban Past" group of Maastricht University have conducted research into how cities sounded in the past and Arnoud Traa made all those great recordings of authentic carts, cars and carriages that are exhibited in the Amsterdam museum. All that's left for us to do is to place the sounds back in the city. And with Talescape, that's the easy part."*

"With the Dam Square Experience, we place the sounds of Amsterdam's past back into the city it is now."

As it turns out, this first application, 'The Dam Square Experience', is already well on its way. The Dam Square Experience will be an interactive scenario that allows users to experience how Amsterdam's largest square, the Dam, sounded around the years 1895 and 1935. Currently, these sounds can be heard as part of the exhibition 'The Sound of Amsterdam' in the Amsterdam Museum. In contrast, 'The Dam Square Experience' will allow its users to experience the recordings of authentic historical objects while actually being there. *"These 'virtual audio sources' will move around realistically and get gradually louder as you move in closer. It will be as if you're really there... eh... then."*

and experience the city's sonic past. Michiel is looking forward to this moment. *"Of course, I want to try it out myself. Walking through Amsterdam and hearing history take place around me must be great. But for the team and me there's more on the line. Once the Dam Square Experience is launched, we will know more about the potential of our platform. Right now, all I can tell you is that the code will work. But I can't be sure if people will like it. The Dam Square Experience is also an opportunity to show potential developers what is possible with Talescape. We hope our locative media concept will catch on."*

It won't be long until everyone with a smart-phone and an Internet connection can run the the Dam Square Experience on his or her phone

Does the team behind Talescape expect it to become a huge success? *"We certainly have faith in the concept, and believe it could speak to many people — both literally and figuratively. The API will be open source, and anyone will be able to run the Dam Square Experience for free. Of course, success or failure is not based solely on quality, but also on marketing, timing and competition. And those are tricky. We all have our other jobs and have only been able to work on the project in our free time. But this has changed recently. I'm now spending three months developing Talescape fulltime with the support of the CWI - in early 2014 Talescape will go public, and then we'll see."*

I don't know if Talescape will succeed either. I don't dare to make a guess. What I do know is that Michiel's enthusiasm is contagious. Personally, I can't wait to use Talescape to create my own spatial mixtapes that keep me company when I'm out for a run and to search for hidden messages when going for a walk. Maybe I'll even upload the recording of this interview to the space where it took place. Then you'll be able to listen to it, like it or dislike it and record your own opinion when you visit us at work. ■

INFO:

Talescape is developed by Michiel Helvensteijn, Marcel Jordaen and John Mulder.

The development of Talescape is supported by 'CWI in bedrijf'. Talescape is based on 'Moving Story' — an idea developed during Startup Weekend Enschede by Lissa Kooijman, Michiel Helvensteijn, John Mulder, Josbert van de Zande, Marcel Jordaen, Chris Knuever, Manthos Petropoulos and Valentina Rao during 15-17 March 2013.

The Dam Square Experience will be accessible to the public before the end of the year, and will be demonstrated during CWI in Bedrijf.

Visit Talescape online: www.talescape.net



MICHEL HELVENSTEIJN

Around the age of ten I fell in love with programming, and maintained it as a hobby until I got my Masters degree in Computer Science at Leiden University roughly twelve years later. Programming is an art (an AR[t]?) and a science, and turned out to be the perfect way for me to express my creativity and logic.

As of writing this, I'm close to getting my PhD in Theoretical Computer Science. But theoretical though my work may be, I'm always happiest when I can apply theory to practice. It's my dream to create something so useful — so awesome — that everyone will want to use it.

While I generally enjoy my work, I always regret that it confines me to a desk, staring at a computer monitor. If I were ever to find a way of writing code (and articles) while walking outside breathing fresh air, I'd jump on it. I have a feeling augmented reality will have a lot to do with an invention like that.

I'm fortunate to have the opportunity to work on Talescape. Who knows? It may bring me just a bit closer to both of my goals!

TALESCAPE ALLOWS YOU TO FIND AND TRACK NEARBY AUDIO SOURCES ON A MAP.

