

THE TROPE TANK. THE IDEA OF A LAB IN HUMANITIES. NICK MONTFORT* IN CONVERSATION WITH PIOTR MARECKI

Marecki: Maybe to start with, I'll ask you to explain the MIT motto, "Mens et Manus" – "mind and hand" – this idea works very well for engineering and science. How do you apply this approach in MIT's humanities department?

Montfort: It's not just this three-word "Mens et Manus" motto that is important, but also different practices from disciplines that are remote from the humanities, such as engineering and the sciences. We're in a time of change, with Massive Open Online Courses and radical different ways to educate, and people are trying to adopt topics, methods and pedagogy from other fields. Of course, you don't want to adopt things which are irrelevant or ineffective. So perhaps hand-based practical types of work done in engineering might not be entirely appropriate in the humanities, but the idea that we try things out, like in engineering or design, is certainly something that the humanities can take up. Specifically, I mean the cycle where we commit to a design and to working through that and to building a model and seeing how it looks and functions.

Marecki: Would you say that your own teaching borrows such practices from other fields? I have noticed that when you teach creative writing you avoid the traditional lecture.

Montfort: This is typical of writing education – there are no creative writing classes that I know about where people stand up and give lectures the whole time. The

* Nick Montfort develops literary generators and other computational art and poetry, and has participated in dozens of writing collaborations. He is the principal of the naming firm Nomnym. He is also a director of the Electronic Literature Organization. Montfort wrote the books of poems *#!* and *Riddle & Bind*, co-wrote *2002: A Palindrome Story*, and developed more than forty digital projects. The MIT Press has published four of his collaborative and individual books: *The New Media Reader*, *Twisty Little Passages*, *Racing the Beam*, and *10 PRINT CHR\$(205.5+RND(1)); GOTO 10*, with *Exploratory Programming for the Arts and Humanities* coming soon. He founded and directs The Trope Tank, a DIY and boundary-transgressing MIT research lab that undertakes scholarly and aesthetic projects and offers material computing resources.

way that you learn creative writing is by discussing it in a workshop environment. Of course, there are different things that you can provide for your students. In some cases, your students might need a therapeutic or self-expressive type of writing experience, and then, as a teacher, you might focus on that, rather than on questions of history and context. At MIT, I don't think that students generally have difficulty expressing themselves or being the type of person that they like. They may have harder or easier lives, but I think that they find support for that through living groups and the MIT environment. Therefore in my teaching, I focus on other things, in particular, how our work is situated in history and culture.

For instance, I do think that there's this 'Myth of Progress' – the idea that the latest and greatest concepts or whatever we're working on as engineers are the only thing that exists. In reality however, many of our ideas are specific to being in the United States or the West. So for instance, when people think about drones and driverless cars today, it's like "Oh well! Finally we've arrived, this was inevitable, this is what we're going to do with technology, of course!" However, the development of teleoperated and autonomous technologies did not just happen inevitably. These technologies emerged from a context in which we have asymmetric warfare and large information-rich companies with the ability to put these systems together.

Likewise, it is important to see how avant-garde and experimental writing practices are also situated in culture. Take for example Mad Libs – I think it's important to explain that it came out of a comic concept, the idea of trying to provoke and create hilarity and to do something for children. Mad Libs was also provocative and didn't exactly fit in the category of a book or a game. In contrast, Dada came out of the experience of World War I and the disgust at the status of art. These contexts are extremely different, and I wouldn't want people to collapse them into: "Oh, two funny ways to make text!"

Once I had a student who made a poetry generator and when I looked at these examples of poems that were output on the screen I saw something very bizarre. I asked: "Where did this wordlist come from?" He replied: "Oh, it's just the ten thousand most common words in English." as if there were such a thing. Obviously, to determine that, you would have to look at some sample of the English language and it's going to be different if it's from the year 1800 or from Twitter. So one of the words that his system had generated was milfhunter, which as far as I know, refers to someone who likes to pursue women who have had children. Although this word is closely tied to the web culture of today and is something you might come across in online forums, spam email or various types of sites, it's certainly not one of the ten thousand most common words in the English language. Something like that is an opportunity to say, "Look, any work that you do, whether it's just gathering words, parsing documents, or trying to figure out how to do translation across cultures, is going to be situated in your choices and your cultural determinations and what you choose to privilege or not."

Marecki: Your department, Comparative Media Studies, consists of a few 'labs,' which perhaps we would not normally associate with the humanities. Could you

explain the concept of a ‘lab’ and how the model is useful in the humanities?

Montfort: Labs are frameworks for collaboration and research work which exist beyond the classroom or an individual scholar or researcher. A lab might have materials that allow people to work together in different ways, it might have funding, it might have a series of technical reports, or other sorts of associated publications. Of course, people make different choices about what they value in collaboration and may choose to pursue certain types of funding which enable good projects, or that lead them to actually have less impact. Though not every framework for collaboration is equally effective and works in every way, labs are something that the sciences and engineering have done very effectively and we can appropriate the idea to use in the humanities.

Here at the Trope Tank, we do broadly defined research which incorporates creative practice, translation, and other types of inquiry.

Marecki: I have noticed that you encouraged a lot of your students to collaborate with you on research projects or creative work, which would, in a sense, be unheard – of here in Europe.

Montfort: I collaborate a lot, not just with people who come here to work under me, such as students or postdocs, but a variety of people, including faculty members and students at other institutions and people in the libraries. I don’t compel people to collaborate with me, but I generally find that collaboration can be tremendously beneficial and I certainly invite it if I think there is a good opportunity to do a project together.

Most importantly, I think collaboration provides an opportunity for people to bring different perspectives and backgrounds to a project. Collaboration also compels attention, work and learning. Generally, when a group of people decide “We’re going to put our name on this, this is going to be our work” they’re much more inclined to really take everything very seriously. I could write a paper and I could say, “Piotr, here’s a paper; tell me what you think, if you have any comments.” Even if you cared



a lot, you'd probably just look through it and make some suggestions. But if I said, "We're going to publish this together, both of our names are going to be on it, I wrote some of it, you wrote some of it, we've rewritten it and worked over it." you're going to be very concerned in this case. You don't want to have something that you think is wrong to be attributed to you, and I don't want that either. If there's something that isn't quite wrong, but I don't quite understand it, I want to understand it, someone might ask me about it, it's going to be my paper too.

Marecki: You mentioned that in the lab formula, there are three very important aspects, teaching, research, and creation.

Montfort: Those three aspects are important, but they do not apply to every lab or researcher. Some people's work is just to do research and they don't teach. Others don't have creative practices. An artist in a studio may be fully engaged in producing creative work, and might not be active on the research or critical side.

It's important to see that there are also other categories which can easily be overlooked. Besides teaching and research and critical practice, there's also editorial practice, which is, in fact, some of what the people who are making reditions in our lab are doing. They're trying to make editorial decisions and figure out how to create a new work that relates to an earlier work. I'd say the HyperCard version of First Screening is an editorial type of project, rather than teaching, research or creative practice, although it certainly has a relation to these and grows out of an interest in how we can provide access to the work. You may also want to distinguish translation from creative practice or research – not that translation isn't creative, but it's a different way producing a new work.

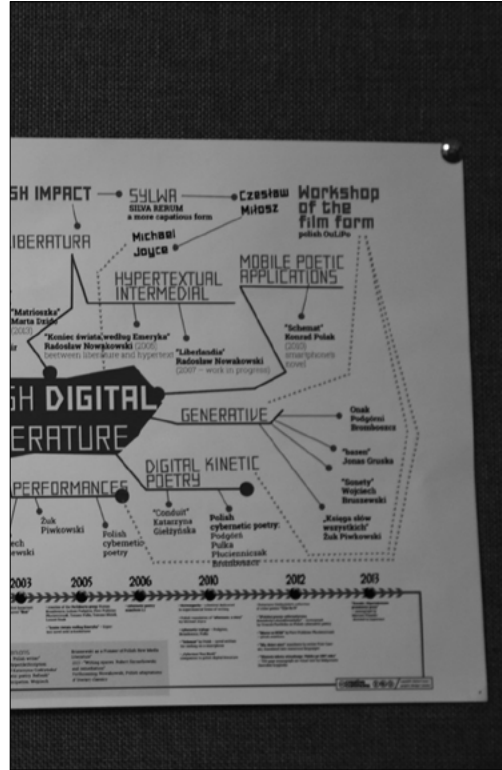
Marecki: Could you say something about the reditions paper that you've worked on with Erik Stayton?

Montfort: In this paper, we were looking at how to characterize works that were based on earlier ones, which were in some ways a different version, form, edition, or remake. We saw the need for a term that reflected the possibility of remaking or redoing something with editorial concern. None of the existing terms fit well overall and so we developed this new concept of a 'redition.'

We did not start off and say "Let's study reditions – what shall we compare and look at?" Instead, we begin with two specific works, two 1984 Apple II programs: Karateka by Jordan Mechner and First Screening by bpNichol, "which were carried into new versions with great care." [<http://www.estayton.com/>] It's obvious that from a certain perspective, the two programs are somehow connected and similar. Both were written on the same platform in the same year and were released as floppy disks. There were further connections beyond the circumstances of their production, such as their interesting relationship to film. Although the works have a lot in common, they are also different – Karateka was written in assembly language and First Screening in BASIC. Most importantly, one of them is in the realm of digital poetry and

literature, while the other is connected to gaming. If one were looking at one of these realms exclusively, one would miss the surprising connection between the two works, which is that both had ‘reditions’ which came later on.

We also looked at how the term ‘redition’ can apply to a bunch of other artifacts, like HD remakes of *Rez* and *Ico*, ‘demakes’ like Halo 2600, porting of arcade games to home systems, or running programs in emulators, instead of using the actual hardware. As we looked at this, we saw that there are a few different dimensions, maybe not entirely independent of one another, but separable nevertheless. I think that Reditions has allowed us to get a better critical angle on works which refashion and refer to earlier works, they ways in which they vary and the ways in which they come together.



Marecki: I remember how, during my first days at MIT, when I saw the old platforms and home computers at the Trope Tank, you remarked that it’s not a museum, it’s a lab. So what does your lab offer visitors?

Montfort: The Trope Tank gives visitors the opportunity to better understand the context and maybe make a better decision about what to research and pursue. The possibilities can range from a fine-grained, close examination of the platforms that are set up and software that is available, to simply looking at a cross-section of different works, different crack screens on the Apple II, putting in different disks and seeing what things are like. The lab is certainly a place for creative work, for actually making new pieces, like the Commodore 64 one-line BASIC programs, that were part of Programs at an Exhibition. It is also a place that can facilitate interesting discussions in different ways, through planned meetings and also when someone sticks their head in to see what’s going on, to maybe turn things on and chat about the systems.

Marecki: Isn’t it easier to just run old software on emulators nowadays?

Montfort: You can easily emulate platforms such as the Commodore 64 on your computer, but they don’t allow you to directly encounter the hardware. Having a system

set up is extremely helpful, and enhances what you can do, very effectively in many cases, using documentation of systems. While you can probably order any piece of software that you are interested in, however obscure, for thirty or forty bucks, actually having a whole system set up is much harder. It's not that old equipment is extraordinarily expensive, but there are other issues involved, such as: will it work or not. So it's nice to have these material platforms here and people have done research here on particular works that they wouldn't have been able to find and run at the MIT libraries and thus the platforms and the systems that are set up in the Trope Tank are perhaps more important than the works we have here. On two occasions, we had people come in to program on the Commodore 64, which is not impossible, but surprisingly difficult – the keyboard has graphical characters and you don't know where they are and there are other aspects to trying to figure out how to move around with the arrow keys. So actually trying to use this system gives you a better understanding of how the software used to work.

Marecki: Now you encouraged people to work on the project called *Renderings*, which involves presenting in English highly-computational work from other cultures, contexts and languages. What kind of impact do you expect to have with this project?

Montfort: It's hard to predict. There is stuff originally written in English that is highly promoted and goes into journals, but still maybe doesn't have that much of an impact. So it's difficult to say whether there will be a big result, but at least this is an opportunity to provide access to these works.

We have the opportunity to read a lot of literature in translation and there's a pretty good amount available – if we want to know what Argentinean literature is like, we can read thousands of books. With digital literature, it's much harder to access, in part because there aren't publishers hiring translators for these types of projects, and all the publication channels and institutions are sort of set against it, along with places such as libraries and bookstores and so forth. When we're dealing with translation of electronic literature that involves computation, possibly interactivity, multimedia, et cetera, it's very typical for this to be one-way: from English out into the “rest of world,” as we call it, which has to do with the accessibility of computers in the United States and other English-speaking areas and the work that has been done.

However, people have produced digital work in a variety of language contexts and cultures and I'm interested in bringing some of that to the English-language reading population, partly just to enrich those of us who read and write English and bring to people's attention both the specific pleasures of the works that are translated and also the consciousness that people are working with computers throughout the world in many different contexts. Also, I find it very enjoyable to work with literary works in this way and I want to be involved in some of these translations.

Marecki: You mentioned that the Trope Tank exists in different forms – during your talks, you usually show photos with old computers, but the lab is also the place where you organize reading series and exhibitions, like the one in the Hayden Library, Games

by the Book. You mentioned that maybe for the project *Renderings*, the final version will be a journal, so that the lab will also run a journal.

Montfort: Some type of journal or accumulation of work has its virtues for a project like *Renderings*. We could send dozens of translations to *SpringGun* and *New River*. However, I'm not sure that these admirable journals are the best possible channel for publishing pieces from *Renderings* and I don't think we would want to disperse the project. Instead, I think that something along the lines of just putting the pieces up as a site, regularly or irregularly, might be a more valuable thing to do. Of course, we won't have the same publicity mechanism or the same channels and readership as existing journals, but we're also trying something new and we will see what will happen.



Marecki: The Trope Tank publishes something called ‘technical reports’ which is not something I’ve noticed at other labs.

Montfort: I have a whole journal paper about technical reports that is titled *Beyond the Journal and the Blog*. Of course, it's partly a provocation to have something called the technical report, which is an obsolescent form that goes along with these old computers that no one can understand why we have here. However, the technical report is something I turned to and consulted while working my undergraduate thesis and later. Specifically, there was work from Carnegie Mellon University's Oz Project issued as technical reports, which I would have otherwise been unable to access, and they were doing quite radical and unusual projects, which weren't something like mainstream biology or chemical engineering. In many cases, they were ahead of the mainstream of their field and there weren't journals that were ready to publish this work. So that's part of my motivation for doing this, the other is really treating it as an experiment. There aren't great positive results so far, but if people were to cite the technical reports as much as similar work published in print journals, it would be a strong sign that it's better to just make the stuff available for free via your own organization, rather than shuffle it into a closed-access system, even if you are giving up the benefits of review.

Marecki: Could you explain the origins of the name the Trope Tank?

Montfort: You always need to choose a name that makes sense for your context. When I was at the University of Pennsylvania, I started a reading series that involved computational works, interactive fiction and digital poetry, and the like, which were presented at the Kelly Writers House. The Kelly Writers House and Penn overall were very familiar with writing (which is not to say that the University didn't have a strong computer science department) and this was something that was known about on the main campus and certainly at that particular place on campus which hosted the series, so I decided to call the series MACHINE, all capital letters, after William Carlos's description of the poem as a small or large machine made out of words. I didn't need to say it was a reading series or there were going to be poems or there would be interactive fiction. I needed to highlight the computational.

When I started my series at MIT, where the assumption is that everything of course involves technology, computers and so on, I called my series Purple Blurb, which is a much more fanciful, unusual name. Purple Blurb derives from Frank Gelett Burgess, probably the first famous creative writer to be an MIT graduate, who actually invented 'blurb' as a term for a certain type of endorsement and also wrote the poem "The Purple Cow."

For the Trope Tank, I wanted a name that suggested inquiry into the literary and into poetics. If we studied interactive fiction all the time, we could call it the Interactive Fiction Lab, but that's not what we do here, right? If we studied digital poetry all the time, we could call it the Digital Poetry Lab, but we do those things and other things as well. I also wanted a name that made a connection to things like the Tow Tank at MIT, which is an actual tank of water into which robot fish and other things are immersed, and also the think tank, as if we were undertaking writing and research in that type of directed mode. So that's how the Trope Tank name came about.

Marecki: What kind of impact do you hope the Trope Tank will have on the humanities?

Montfort: One of things I'm really trying to promote is the concept of creative computing, which refers to people doing culturally-situated, creative, ludic, voluntary, aesthetic types of work that don't need to be divided into video game, digital poetry and electronic literature, but instead can be seen as something in a joint context. I'm not arguing that the categories of video game or electronic literature don't exist, but rather that it's productive to look at a lot of the creative work that's happening between them. Though we have conferences that have emboldened us to investigate these two categories, we also need something that allows us to cross them.

Another thing that I'm trying to promote is the material history of computing, by keeping these systems running and also providing a way for people to learn about them in a practical manner, how to operate them, program on them, read on them, in the same way that they might learn a little bit about letterpress printing and dot matrix printing and other aspects of the material history of text.

Marecki: What about impact on the local community? How do you encourage people to visit the lab?

Montfort: Although the building which houses the Trope Tank is open twenty-four hours a day, the lab doesn't feel welcoming in the way that the MIT museum or some other spaces might, and people from Cambridge or Boston aren't just going to wander in if they don't have some connection with MIT. So I try to look for ways that I can encourage people to come by, such as through Independent Activities Period activities and the People's Republic of Interactive Fiction meetings. Since I don't have to reserve a classroom or go through some process to set up a meeting at the Trope Tank, I can just invite people and I do. That's the way it works with the People's Republic of Interactive Fiction, which meets here monthly. Also, students come here to work and class visits are rewarding for me and I think for the classes as well.