

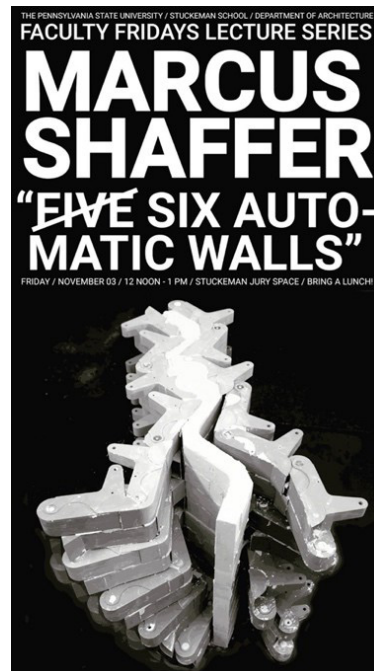


Figure 1. Faculty Fridays Speaker Posters. Images by Marcus Shaffer, Amadeu Santacana, Istvan Gyulovics

Hyphen No.2: Emergence (2025)

ISSN: 3066-151X

DOI: 10.59236/hyphen2185

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STRATEGIES, PRINCIPLES, AND PROTOTYPES

Marcus Shaffer, Amadeu Santacana, Istvan Gyulovics

(Three Faculty Fridays speakers walk into a bar)

Like the Hyphen Journal, Faculty Friday Lectures in the Department of Architecture at Penn State have been a space of shared research and methodologies for more than a decade. Four-to-six times each academic year, Faculty in or associated with the Department of Architecture discuss their research, preview a book or paper idea, and/or show built and creative works to an audience of students and peers. The lecture series critically highlights faculty work in the Stuckeman Family Building while simultaneously modeling various approaches to architectural research for our Graduate students.

In this issue, Hyphen listens in on a conversation between three Fall 2024 Faculty Fridays speakers – Istvan Gyulovics, Amadeu Santacana, and Marcus Shaffer. In a wide-ranging and lively conversation, the three Faculty Friday lecturers exchanged questions and observations about craft, process, and priorities in each other's shared work. Excerpts from their conversation:

MEANS OF WORK

Amadeu (AS):

Topic – construction. I think both of you (Istvan and Marcus) are making something through working with your hands, and this creates absolutely a direct relationship with what you are making and a strong personal relationship with the object. At the same time, it's like a one-to-one relationship without any intermediary. You are making a lot of decisions, so you have a real directed relation with that object. You know it's like without intermediaries; you are having a clear conversation. But my question is, sometimes you are working with your hands, but you are also using a lot of technologies. On one side you are being super direct with the object that you are building, and on the other hand you have quite a few intermediaries in between. How do you relate to that paradox?

Marcus (MS):

There are tools and technologies you come into contact with, in design - you encounter them, you learn how to use them, they appeal to you, you keep using them. If they don't appeal to you, you drop them. For me, Stuckeman has been amazing in this way. If one wants to use a robot, we find a robot. If one wants to use a CNC plasma cutter, we find a CNC plasma cutter. There's something wonderful about having access to these things, and if you are channeling your work, the tools and technologies are something you and the work pass through – I don't think about it too much. Adopting new ways of working and tooling is a part of the instinct we use to engage with our ideas.

If we didn't use the tools we have at our disposal in academia, I think it would amount to a willful ignorance. My hope is that these tools and machines become available and ubiquitous to everyone. I hope people are getting exposure to laser cutting and CNC in middle school or high school classes, so I see these things turning into common tools. They are common tools in architecture already.

With the first project I showed in the lecture (robotic formwork), I've had to learn so many different things to try and realize that work, so many different tools, technologies, programs, all this new crap. And at some point, I'm so sick of new tech. With the second project (Roto-tampers), I feel that it's much more immediate. I'm using skills and tools and machines that are more familiar to me.

Istvan (IGy):

(To Amadeu) So, are you referring to the two objects I made recently that were featured in my lecture – the table and the chair? In some way, I realize that with those two objects I haven't made proper shop drawings for them before I started making them. I just made sketches and little models. I was trying to approach design differently. I started the table with three elements, and I carried that into the chair. Both projects are developed out of a single piece of wood, out of one board. But I haven't drawn the proper drawings for them. I just started making them. In the process, I feel like these two pieces of furniture, through the materials and proportions, were talking back to me... and that I altered or changed the parts through the making process.

MS:

Is it normal for you to make a shop drawing every time before you make a piece of furniture?

IGy:

Oh yes. Every time. Normally I 3D model everything and then lay it flat. I make cut sheets for everything... sheets for every part. Sometimes I even print them out and glue them onto the wood, so the forms are perfectly established before the manufacturing begins.

MS:

So, this time the work was more spontaneous, working on the fly?

IGy:

Yes. Compared with the way I would normally process pieces of furniture, I feel like it has an architectural relevance as well. The buildings my office designs, the architect is the designer, not the contractor. As architects we are overseeing the building process but we are not part of it like the Master Builder in the 18th century, when you designed something and you also had total control over the construction.

MS:

But in reference to Amadeu's question, I feel like you are a maker with limitations in relationship to the tools and technologies that you will use. There is a line that you will not cross, and this restriction or rejection is

clear in the architectural models you showed in the lecture, all the way through to the table and chair you fabricated. But, with the table, this was the first time you ever used a CNC mill.

IGy:

Yes, I 'm still learning a lot of new things – especially in Stuckeman. It's all interesting, but to be honest, I have second thoughts about using the CNC mill. I was really precise with my drawing file; with the file I gave to the Digi-fab tech (Jamie Heilman). The curve of the table was made up of segmented lines instead of a true curving line, and the tabletop was cut by the machine as that segmented line. I think with a jigsaw or a handheld router I would have gotten better results, because you can correct your self while you are cutting.

MS:

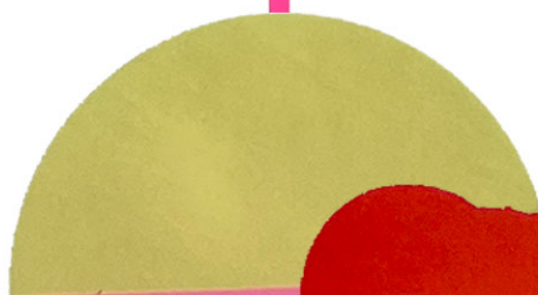
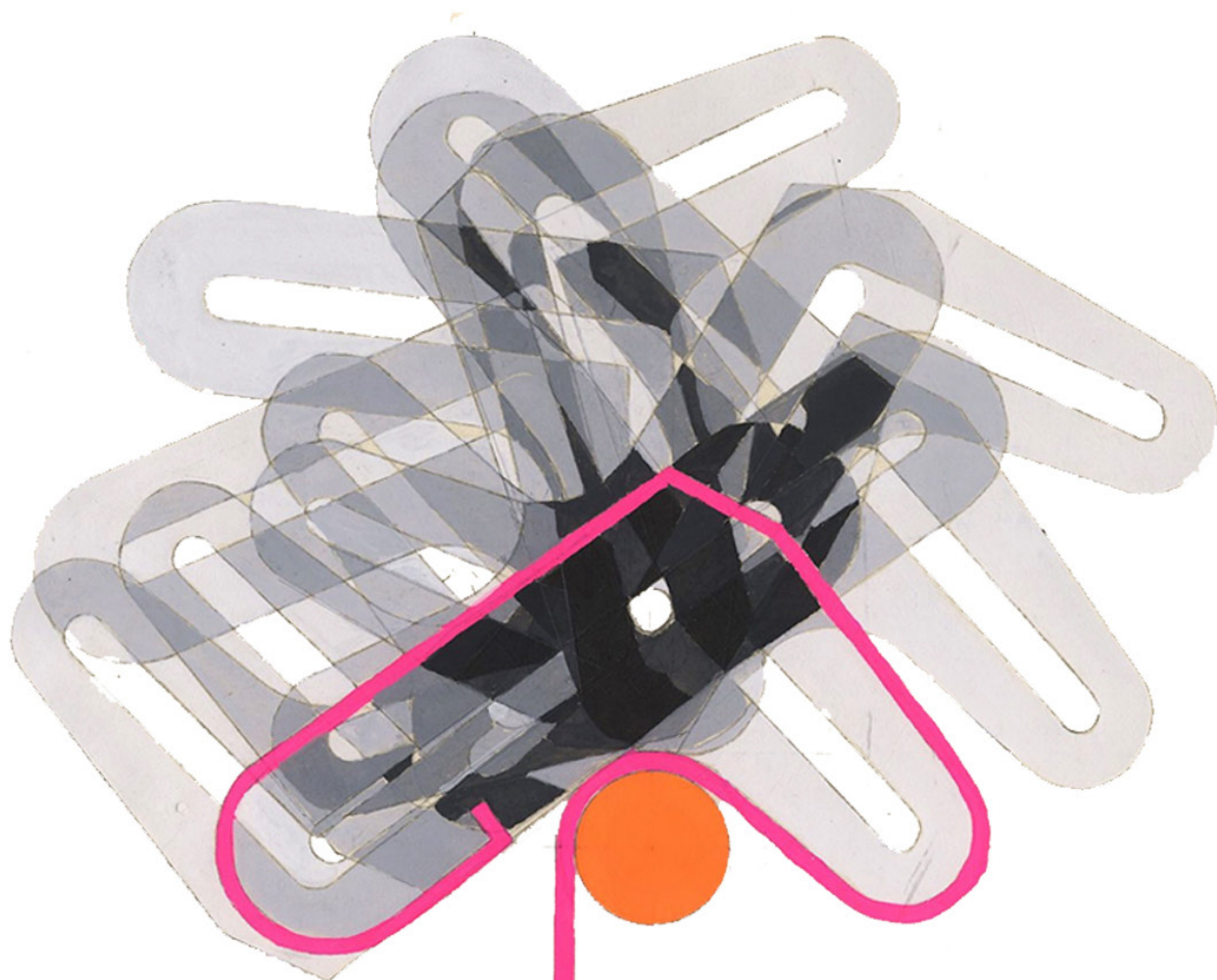
I know what you're saying. But I also feel that if you say you are just going to cut it by hand or with a router because it will be faster and cleaner, somebody will think you're very arrogant, thinking that you are faster/more precise than the CNC mill. But for you, it isn't about speed. I get the impression that you are not working to become a speedy person.

IGy:

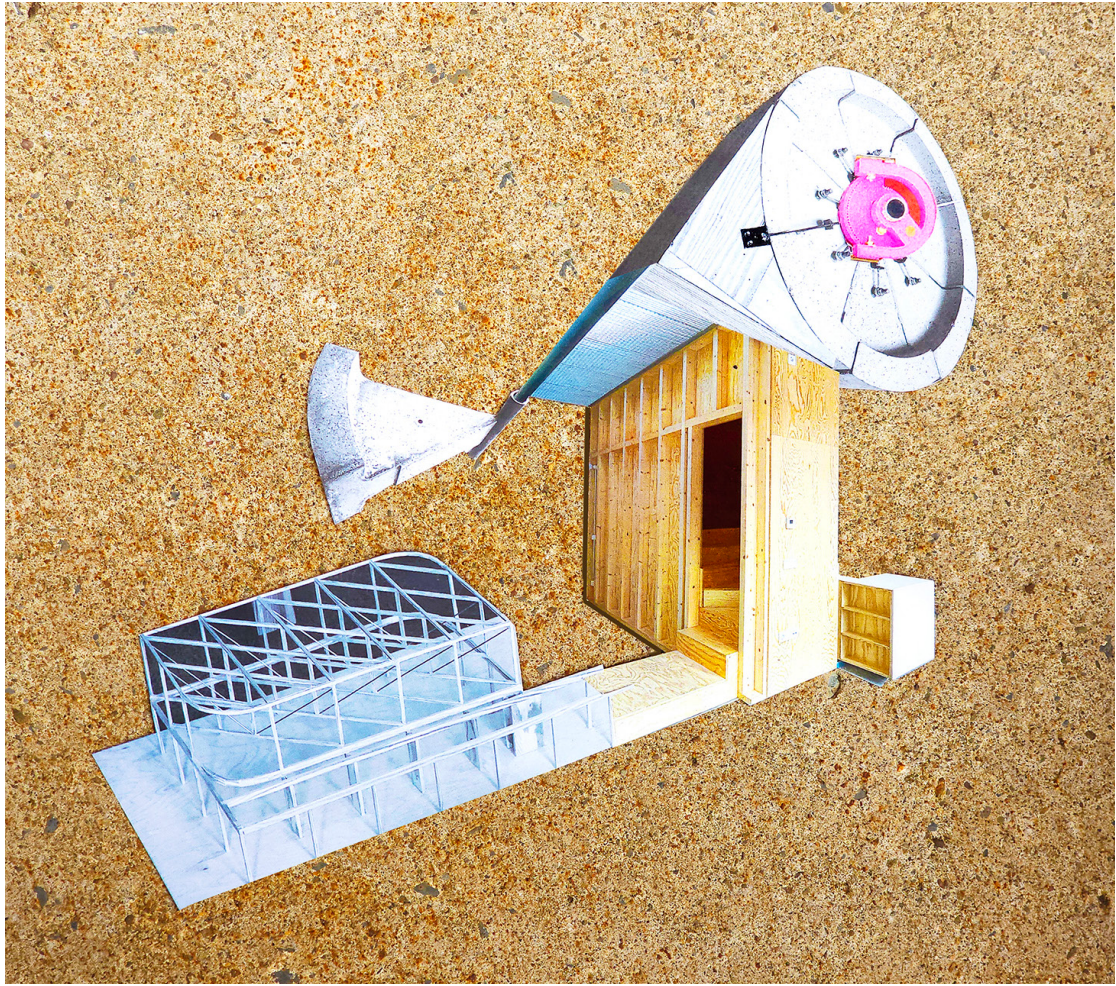
(Nodding) I feel like when you're rushing things, for me it's sometimes a spectacular failure. So, I end up having much more work correcting the mistakes I made.

MS:

My observation on your lecture is that the lecture wasn't so much about an architect moving across scales. What came through was a picture of someone who is very cohesive when designing. There's a heightened level of attentiveness to things and a cohesive sensibility. I'm thinking, for example of the small, folded paper trees in the model of that building on the sloping terrain; they had the same sensibilities as the chair you showed. We know they are made by the same person. I think there's something similar in the way the shingles on one building are ornamental and functional – as the paper cord on your chair is functional and ornamental in the pattern you employed. There's evidence of doing things a certain way. Your Faculty Friday lecture was a great introduction, and the thorough sensibility that emerged in the lecture – and which I see in how you teach - is a great message to give to the School.



Cantina



IGy:

Thank you. It is encouraging for me if you find these connections between the chair and the tree, if something like that is conveyed or readable. I find them really separate, but...

EMERGENCE

MS:

My observation of Amadeu's lecture was going to be about an attraction to the idiosyncrasies of the city, and how you use humor to make sense of them or give them purpose. The projects you showed, somebody might see those spaces in the city as waste, remnants, or leftovers – abandoned spaces. But you engage with them in delightful ways. It's so cute to discover those spaces can be useful – fitting a family (and guests!) into a little dwelling space or extending a building into a leftover wedge of land. I also

think there's something great in that people can discover these spaces, to take a sharp turn around the corner and discover your wedge building, or to open the door to the family house and see the plywood tower holding the center of the tiny space. It's funny and magical and attractive. What I walked away with in terms of what distinguishes your architecture, an attraction to these things, these spaces that don't make sense or that appear neglected. But your humor brings them to life in a really magical way. It was wonderful to see that.

AS:

I'm not really interested in humor; I'm interested in experience. Two important things are to understand that all things are complex and at the same time, there is no importance. The real importance in a work of architecture is not what we say is important. And then we introduce this kind of relativity to everything. When we make something, we work for the experience. It doesn't matter if it's a book, a class, or a building, and at the same time we must understand that it's not really important. OK – here, perhaps I introduce humor. We are doing something with a lot of effort, but finally, you said “that's not so important”. Because sometimes, in school basically, we try to sell a lot of things through architecture - like absolute truth. This is when I am sure that I am using humor, that you mention, to try to destroy this kind of truth about some issues.

For me there are two sides when you design, write, or teach. The experience that you have on one side, and then you always have the responsibility to consider people who are on the other side. Clients, residents, students... always have another kind of experience. On one hand I am super egotistical because I am working for my own experience, but then on the other hand, we must be absolutely generous with the people on the other side. And this is what I'm saying that when you are working with your hands, you have experiences more with hands than with other types of tools. When Istvan says there are lines that he doesn't want to cross, it's important that we define the lines that we don't want to cross. And for me these lines are drawn around the experience.

MS:

(To Amadeu) I like what you said about turning down the importance and self-importance. Not that you're advocating a sloppiness or a down-grading of architecture, but for the designer to simply come off the pedestal and say, “I'm a person in the street too. I made this building, and I have intentions, but I am also together – with you – as a person who lives here.”

I feel like this is a hallmark of people in our generation. We don't need to be removed. We want to be in the mix, working with people, working next to other people who are doing things.

AS:

Yeah. Try to turn down the importance because the importance is in another place. There is an intellectual importance, an experience, a discovery, research, discoveries, personal discoveries, sharing these discoveries. All of this carries small portions of importance. More than one huge one.

MS:

To me, that's the *emergence* part of our conversation – discoveries. Architecture doesn't appear be a road to self-discovery as it was when I was in school. It might be a result of coming out of an education that was heavily into craft. I remember thinking, at the time, that craft was a dead-end street, you practice craft as a technique until you master it and then you're done - you can make perfect hand cut dovetail joints. But, in terms of emergence, I realize that I had underestimated craft. I shouldn't have been thinking about it as technique. These days I see it as discovery and transcendence – the hard work you can do on yourself as a person while you are making things. Seeing limits and negotiating them. There's a different person that emerges, and it's not necessarily an egotistical thing. Lots of people have described practicing their craft and leaving themselves behind in a form of meditation, focus or surrender. You're not really present in a big way. That's why I love this word "channeling" – a communication with the work, as Istvan was describing earlier. The architectural project just goes through a person, and through it they discover they are different. There is an emergence.

AS:

Our work is to try to get students to discover what they want to do here in architecture and what they can do in the future. You need that to grow, but at the same time you can share this with society. And doing all this architectonically. Pushing the students to grow inside the school and have a compromise.

IGy:

But the role of architecture is really about to change these days. Students can be dreaming about designing airports and theaters, but the real ar-

chitectural questions are in residential projects – simply because of the sheer number we require in the near future. It's probably because I'm coming from a different environment, but it's weird for me that in the United States it's an issue that is massively ignored; *How we live today?* There is also a big shift where quality lies. For me, everything seems so temporary and residential architecture responds the obvious way: light timber frame. For a European, we equate this technology with temporary structures like weekend houses or stage sets. When you do not have any kind of heavy, solid wall, thermal mass in the building, you feel more vulnerable. Residence and settlement, in my way of thinking, are hardly temporary and that evokes trustworthy heavy building materials. This is super interesting and weird for me, and it connects back to the architecture.

UNFINISHED, OPEN, POTENTIAL

IGy:

Amadeau, I have a question for you based on your lecture. I feel like commissions for building conversions and extensions are common to you and me. Personally, I enjoy the intellectual challenges of this type of work. Not just because I believe it's the only way of being responsible for a sustainable future or being resourceful. I think transforming or converting existing buildings is the natural way of creating continuity in architecture. Demolishing a building and creating our own at a certain place deletes and breaks the possibility to read the history of that place. So, when we are dealing with an existing building, we realize that they have different adaptive potentials. Some of them adapt new functions better than others given their structural and spatial systems. What interests me (deeply), is how can we design in such a way that maximizes the adaptive potential in buildings without losing their essential character?

AS:

An existence is always a fact. It incorporates things, which are always interesting when worked on. And the adaptation you mention is related to the disconnection between the space and the program. In dislocating both and in taking a step back. Always clients they are talking about them. It's interesting always for us to go one step back and try to design a more open system, to fix the core and try to maintain the other elements to be more open, because we cannot predict what will happen with a building. And something more open that users – it doesn't matter if it's a couple or it's a company – can decide to change how they inhabit a space. I think we

cannot predict so much. The inability to predict reinforces the inability to disregard anything pre-existing. Although it also reinforces the idea that what we do will not always be there.

IGy:

Is it super strange, for you?

AS:

Yeah, yeah, I love the things that disappear more than the things that always are there.

MS:

It makes me think about the lectures that you two (Amadeu and Istvan) presented. With Istvan I'm drawn back to William Morris and the work of Mackintosh, where behind the work there is an aesthetic principle and the principle drives the architecture. In Amadeu's work, I think the design is founded on strategy. These are two really different ways of designing. It's worthwhile noting that the colors in Istvan's lecture include white and the colors of raw materiality – right? But in your case, Amadeu, we don't ever see a unified "look", style, or color palette. You didn't communicate that there were certain materials you like to use. It's a much more strategic approach, maybe at the expense of aesthetic principles? In Istvan's work, I feel like he is communicating these are the boundaries that I'm working in, and those boundaries contain the ideas. Those boundaries limit the strategies. Amadeu, I'm not saying that your strategies would not have limits, because it's clear that you wouldn't go off and design a skyscraper.

AS:

But in your case, it's the same, because you have the wheel, you are designing a system. You are taking one step back designing a wheel that can make a lot of things, but dependent on others. There is a difference between language and syntax. I like your comment that I have no color palette, or no aesthetic – because I've tried to break that... to try to not have an image. I tried to destroy the language, and try to work like the wheels, something before that, to build a lot of things. Work only with syntax.

MS:

You're the strategist and you're working together with the peculiarities of the site, almost as a co-designer. But I also want to address your comments about the absence of a design image. I used to wrestle with this, but I'm almost always purely interested in the process of designing and/or building. When the process is done, I'm usually super disinterested. Because of this, the work I make often appears unfinished. Early in my career this came across as indecisiveness, but now I can say it's really because I fall in love with the process and the afterglow of things that are prototypes rather than the final or finished thing. For me, potential is always stronger in buildings, I don't see the finality. It's much more valuable to have something that is constantly a little bit unfinished because it's a motivator, or it leaves the door open for change and evolution.

So, going back to the Faculty Friday Lectures, I would offer up that you (Amadeu) are the strategist, Istvan is the principled designer, and I'm the prototype-r.

AS:

Yeah, that's nice because of this issue of emergence that Hyphen is interested in. To "unfinish" everything. Don't finish anything. That's the emergence, stop a little bit before.

MS:

(To Istvan) this is also where spontaneity is really good for you, healthy for your work. When you make a table again or when you make the next chair, this dabbling in spontaneity will help to sustain you. In some ways, if you do the work according to the shop drawing and you achieve making the shop drawing, to whatever degree of perfection, it's done. The project becomes closed. But I also know that you are coming from a tradition where to start a new chair design, you really need to know your chairs. You start with the lesson of chairs that came before yours. Things are a bit different here. Here you can start with a pile of stuff and make something to sit on.

IGy:

Thank you, Marcus. You kind of answered my adaptive potential question to Amadeu. There is a difference between unfinished and open-ended because of the negative connotations to "unfinished". If you leave something *open* there's adaptive potential. It also gives you the potential to address feedback from the client. Otherwise, we can just guess what's working, what's not.

I have to reflect on your comment of my color/materials palette. To be honest with you I'd rather not think with colors. I prefer thinking with light and materials simply because colors trouble me. I believe our task is to create a background or frame for life. In that sense white is a perfect color because life is almost always never white. The surrounding color reflections are pronounced on white surfaces. The colors I'd like to use are the exact colors of materials I use. If we need to change the color, it means that we would like to cover up something. It only happens in cases when we use materials that don't appeal to us. I have never thought about this but it can be a principle.

