# Understanding Architectural Design Studios as 'Communities of Tacit Knowledge'

**Teaching Module 10** 





### **Module Aims**

To introduce the theory of Tacit Knowledge in the context of architectural education

To understand how tacit knowledge is transferred, particularly in design studios

To frame design studios as "communities of tacit knowledge"

To apply these theoretical conceptions of tacit knowledge to two cases:

- summer schools
- end-of-semester crits

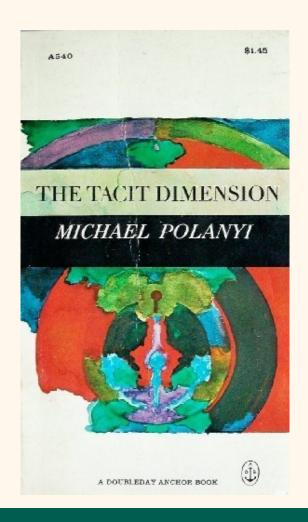




## Tacit Knowledge

"I shall reconsider human knowledge by starting from the fact *that we can know more than we can tell.*" (Polanyi, 1966, p4)

"We have seen that tacit knowledge dwells in our awareness of particulars while bearing on an entity which the particulars jointly constitute. In order to share this indwelling, the pupil must presume that a teaching which appears meaningless to start with has in fact a meaning which can be discovered by hitting on the same kind of indwelling as the teacher is practicing. Such an effort is based on accepting the teacher's authority." (Polanyi, 1966, p61)







## Tacit Knowledge

#### What is tacit knowledge?

- Knowledge that we cannot tell to others, that we express instead through our actions
- Actions can be physical, verbal or cognitive

# How can we transfer tacit knowledge according to Polanyi?

- Student must dwell in particulars (e.g. drawing technique) while keeping in mind the entity (e.g. overall design task) which is jointly constituted by these particulars
- A student must trust their teacher's authority, even if they don't understand the design task or drawing technique at first



Professor with students, TACK Summer School, September 2021 Photo by Marwan Magroun.





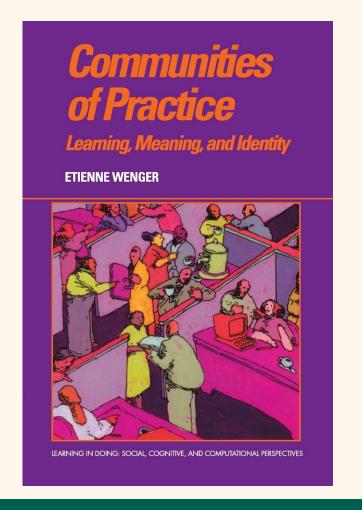
### **Communities of Practice**

"Communities of practice are the prime context in which we can work out **common sense** through **mutual engagement**.

Therefore, the concept of practice highlights **the social and negotiated character** of both the explicit and the tacit in our lives."

(Wenger, 2008, p47)

"Teachers, masters, and specific role models can be important, but it is by virtue of their [students'] **membership** in the community as a whole that they can play their roles...newcomers must be granted enough **legitimacy** to be treated as potential members." (Wenger, 2008, p100)







### **Communities of Practice**

#### What is a "community of tacit knowledge"?

- Adapted from "community of practice", but emphasising the way the social and negotiated character of such communities depends on, and defined by, tacit knowledge
- That members of a community mutually shape its specific common sense, which is substantially tacit

# How do communities transfer tacit knowledge?

- New members of a community learn by being invested with legitimacy and playing an active role in that community
- Transfer doesn't rely on masters or teachers



A community of tacit knowledge composed of students and professors TACK Summer School, September 2021. Photo by Marwan Magroun.

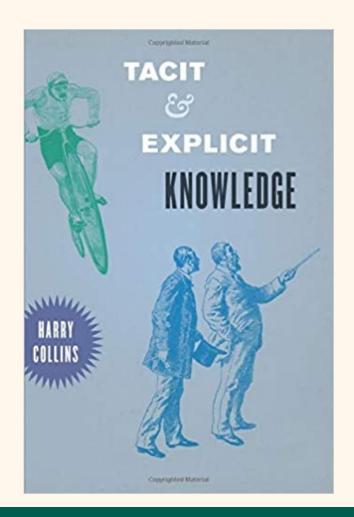




# Collective Tacit Knowledge

"collective tacit knowledge [is] the knowledge that the individual can acquire only by being **embedded** in society. This is called "strong," because we know of no way to describe it... Strong tacit knowledge is a property of **society** rather than the individual." (Collins, 2010, p11)

"[In] older students **tacit knowledge** is acquired by **socialization** among parents, teachers, and peers. In the workplace it is acquired by "sitting by Nellie" or more organized **apprenticeship**. In science it is acquired during research degrees, by talk at conferences, by laboratory visits, and in the coffee bar." (Collins, 2010, p87)







# Collective Tacit Knowledge

#### What is a "Collective" Tacit Knowledge?

- Knowledge that can only be shared and communicated by people embedded in a community of tacit knowledge
- It resides, in flux, in the community itself

# How is collective tacit knowledge transferred?

- Individuals are socialized in communities through sustained formal (apprenticeships, architecture degrees) or informal (conversations, observation) interactions
- More senior members (parents, colleagues)
   assist new people to become embedded



Informal lunch time conversations within a community of tacit knowledge TACK Summer School, September 2021. Photo by Marwan Magroun.





## The Summer School: Cross-cultural Exchange

Architectural summer schools are one place where multiple "Communities of Tacit Knowledge" from different schools and design studios **meet** and **negotiate** their differences

These communities might differ in:

- educational approach (e.g. academy of fine arts, technical university, liberal arts school)
- geographic region and language
- approaches to disciplinary issues such as representation, context, technology, the architect's role, autonomy, theory etc.

These are often differences of collective tacit knowledge, making it difficult to **bridge** between communities



Participants of the CIAM Summer School, Venice, 1956 Photo by Jaap Bakema, Collection Het Nieuwe Instituut





## The Summer School: Cross-cultural Exchange

Encountering these differences can reveal the **hidden** tacit knowledge of a participant's own community: difficult to recognise from **within** 

Summer schools have developed specific **tools** to quickly **integrate** participants in the summer school's own "community of tacit knowledge"

Some of these tools include:

- the **authority** of "master" architects
- **structured conversations** centred on tangible drawings, models, buildings
- **informal talks** over meals or site visits
- publications prepared ahead of time to familiarise participants with the community



Jaap Bakema with participants of the Salzburg Sommerakademie, 1967 Photo by Frans Hooykaas, private collection





#### The Crit: Internal and External Communities

End-of-semester crits are a moment where **external guests** are invited into the "community of tacit knowledge" of a studio

External guests are part of their own "communities of tacit knowledge," with their own interests, biographies and bodies

These differences affect the way they **value** students' projects in a way that can be difficult to make explicit

Crits can reveal strong **consistency** between guests, tutors and students on issues such as:

- graphic and linguistic **convention**
- understanding of space and construction



Students presenting their work to external guests and audience in a crit TACK Summer School, September 2021. Photo by Marwan Magroun.





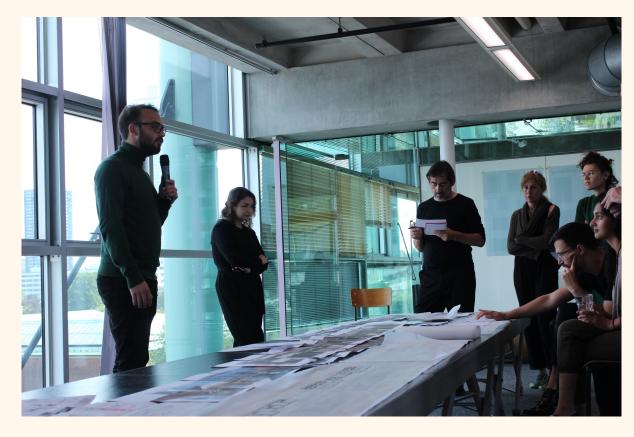
### The Crit: Internal and External Communities

Crits can also reveal differences between participants' various communities including on:

- aesthetic and formal qualities
- disciplinary and evaluative terminology
- architectural and cultural references
- ethics, politics, and other broad **social** issues
- the **role** of architecture and the architect

Some of these disagreements can be **overcome** and differences **bridged** when participants

- focus on the immediate qualities of a students' project and representations
- emphasise dialogue over their authority



Students presenting their work to external guests and audience in a crit TACK Summer School, September 2021. Photo by Marwan Magroun.



