The root is always a discovery and is more dreamed than seen
— Bachelard, Earth and Reveries of Repose
This studio takes its name from Hugh Johnston’s 2005 book *Radical Campus: Making Simon Fraser University*. Founded in Burnaby, BC in 1965, Simon Fraser University (SFU) was radical for its majestic site atop a previously undeveloped mountain; for its visionary master plan by Canadian architect Arthur Erickson (with Geoffrey Massey); for the experimental pedagogy led by its young professors; for the revolutionary zeal of its students; and for the unprecedented speed at which the whole University was planned and built, moving from conception to manifestation in just 2.5 years, thus earning the tag “instant university.”

All such radicalities animated this studio. But another “radical” element grounded the work, one that is latent in both Erickson’s SFU design and Louis Kahn’s message to students. Together with revolutionary extremes, “radical” implies something basic, intrinsic and deep-seated. The term derives from *radicalis*, Latin for “forming the root”—a life-sustaining agent. Like roots of a tree, that which is “radical” may be invisible to normal vision but nevertheless provides stability and vitality for healthy and exuberant existence.

This studio posed “radical” architectural, cultural and philosophical questions:

What is at the root of a thriving University?
What are the roots of learning?
What are the roots of wondering?
What are the roots of architecture?

Beginning with these questions, students created heuristic devices. Heuristic implies finding and learning by trial and error, by both careful experiment and accidental discovery. Instead of following strict disciplinary methodologies, we began heuristically. Through a variety of hands-on modeling, drawing and installation experiments, students created conditions that engendered serendipitous Eurekas, illuminating accidents, effects and consequences. Our aim was to rediscover the delightful desire for learning and life.

This studio included heuristic travel to Toronto, Ottawa and Montreal to visit the major universities embedded in these cities, and to spend time with the architects who are leading award-winning design projects on these campuses.

Returning to Winnipeg, we translated heuristic devices into heuristic chambers—experimental pilot projects for the University of Manitoba’s Fort Garry Campus. Building on the 2016 Visionary (Re)Generation Master Plan, students identified sites and designed interventions to cultivate collective discovery, encouraging students, profs and publics alike to recover the roots of learning.

In the winter term, students comprehensively designed heuristic edifices. Collectively they manifested a radical vision for a more livable, luminous, experimental, tasty, tessellated and harmoniously cacophonous campus.

Throughout the year, students aimed to create campus architecture that is truly “radical”—revolutionary, visionary, urgent, artistically-vibrant, heuristically revelatory, democratically active, wondrously ludic, and rooted. Their work invites all of us to dig down deep, and (re)discover architectures of learning.

The serendipitous three-week strike of academic staff in November 2016 (depicted above), made the topics of this studio all the more radical and relevant.
Bryan He (Term 1, Episode 1): Heuristic Device - an improvisatory musical theatre made with instrumental material found by surveying our radical campus.

Musical motions: striking, shaking, swinging, succumbing to gravity, reflecting, amplifying, rocking.

Recordings of individual musical materials (assembled in the final symphonic device).
Bryan He (Term 1, Episode 3): Heuristic Chamber - an inhabitable apparatus for jamming, performing, and composing - attuned to its setting at the bend in the Red River, with clay pot acoustic ceiling treatment inside; and designed to apply musical creations in either direction of the campus or the river.
Bryan He (Term 2): Heuristic Edifice - a place of concord and discord: a Chamber Music Hall, with practice room towers in dialogue with the river, a musical instrument museum, a grotto/archive, an interior street theatre, and a radical jazzy speak-easy pub off the back-alley.

Elevations: Chamber Music Hall (term 2)  Heuristic Chamber (term 1)  Final model, with drawer/section model of museum/grotto.
Bryan He (Term 2): Heuristic Edifice - a place of concord and discord - Chamber Music Hall for the School of Music, along the Red River. Section through the alley-way jazz pub; sky-lit street theatre; main performance space (with museum and archive below); and riverside lobby.

Intermission: River-side lobby, with view to the Red River and Heuristic Chamber.

Interior Street Theatre

Research collages/drawings, studying hybrid musical bodies and spaces of the ear, mouth, mind, and concert hall.
Quiyi Zhang [Term 1, Episode 1]: Heuristic Device - collages & installation studying student diversity, emotional variety, and the spaces of dramatically playful interactions - day and night - in the context of campus residence life.

Quiyi Zhang [Term 1, Episode 3]: Heuristic Chamber - views through the social jungle to the landscape and river; and a place to study and snooze in the shade.
Quiyi Zhang [Term 1, Episode 3]: Heuristic Chamber - a topographical social jungle off the student residences - an inside/outside place for meeting, studying, sliding, playing, and dreaming.
Yiqiao Hao | Term 2: Heuristic Edifice - a new student dining hall in a found linear space between the university centre and nursing school, and between the central university promenade and its peripheral student residences - intertwining social and nutritional well being, with home-grown food and student-run kitchens.
Yiqiao Hao (Term 2): Heuristic Edifice - a new student dining hall with adjacent roof garden, atrium study space, new links between campus buildings, and model exploring intertwining architectural spaces and social interactions.