

**UTown
Residences**
大学城公寓

卓越研究与科技企业中心
CREATE

Town Green
大草坪

香灰莉木寄宿学院

**Tembusu
College**

教育资源中心

**Education
Resource Centre**

Tembusu Hill
香灰莉木山

**Cinnamon
College**
桂树寄宿学院



Stephen Riady Centre
斯蒂芬李文正中心

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1. 大学城项目6个地块鸟瞰图
1. Aerial view of the 6 parcels of the UTown project

打造永恒之美： 新加坡国立大学中的共享景观层设计和场所营造

CRAFTING THE TIMELESS BEAUTY: DESIGNING OF SHARED LANDSCAPE LAYERS AND PLACE-MAKING AT THE NATIONAL UNIVERSITY OF SINGAPORE

STX景观设计事务所 / STX Landscape Architects

新加坡国立大学大学城

新加坡国立大学是新加坡历史最悠久的大学之一，而大学城则是其中一座新建的校园。该项目中的景观设计主要包括空间设计和场所营造，以及能够有效促进社会融合、生态保育的文化与生物多样性保护。

作为学校发展规划中的重要组成部分，大学城被定位为新加坡国立大学在肯特岗校区的延伸。在地理位置上，其与主校区分立于亚逸拉惹高速公路两侧，但又经由新建的步行及车行高架桥而贯通。大学城占地约19hm²，场地原为地势起伏的高尔夫球场，独特的地形也成为了该项目的一大特色。整个大学城项目共由6个不同的小项目组成：桂树和香灰莉木寄宿学院、陈爱丽丝与彼德学院、大学城公寓和大草坪、教育资源中心、斯蒂芬李文正中心，以及卓越研究与科技企业中心（CREATE）。

该项目的景观设计主要包括空间设计和场所营造，场地中的自然轮廓得到了保留，以尽可能地保护原有的成熟树木。树木保护是大学城项目在规划、设计和实施过程中的主要推动力。场地中重要的成熟树木和稀有

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摘要

城市密度的日益增加深刻影响了城市空间的形态及人们的生活方式，随之产生了对于社会中具有不同功能的分层景观的需求，以通过精巧的设计来融合“多样性”。而便于人们在群体中或个体之间分享知识、传播信仰和价值观，并最终推动社会发展的学习场所，则是体现“共享范式”的理想环境。本文将着重讨论现代视角下分层景观的特征，并以新加坡国立大学大学城的跨文化愿景为例，探讨设计方法、尺度及文化在推动设计、分层及共享过程中的作用。

关键词

场所营造；共享的景观层；多样性；互动；容纳；合作

ABSTRACT

Increasing intensification of urban density impacts urban spaces and lifestyles, necessitating in society a landscape canvas suitably layered for diverging needs and goals, and ideally blended to cater to “multiplicities” in well-designed fusions. Places of learning — where knowledge, beliefs and values are transferred to and between groups and individuals to better society — is an ideal environment where this “sharing paradigm” manifests. This paper focuses on layered landscapes of contemporary dimensions; approach, scale and cultural references, contributing to design, layering, and sharing, through the cross-cultural visions of the University Town of National University of Singapore.

KEY WORDS

Place Making; Shared Landscape Layers; Diversity; Interaction; Inclusion; Collaboration

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项目地址:

新加坡国立大学

项目面积:19hm²**项目委托:**

新加坡国立大学、新加坡国立研究基金会

景观设计:

STX景观设计事务所 (原Sitetectonix私人有限公司)

建筑设计:

AWP公司 (大学城公寓和大草坪), W建筑事务所 (教育资源中心), DP建筑事务所 (陈爱丽丝与彼德学院、宿舍学院4号、桂树和香灰莉木寄宿学院、卓越研究与科技企业中心)

首席设计师:

Helen Smith-Yeo

设计时间:

2007年

建设时间:

2011-2014年 (分期进行)

所获奖项:

2014年第11届国际景观设计师联盟亚太地区景观设计类杰出奖

PROJECT LOCATION:

National University of Singapore

AREA (SIZE):19 hm²**CLIENTS:**

National University Singapore, National Research Foundation

LANDSCAPE ARCHITECTURE:

STX Landscape Architects (Previously known as Sitetectonix Pte, Ltd.)

ARCHITECTURE:

AWP (UTown Residence and Town Green); W Architects (ERC); DP Architects (College of Alice & Peter Tan, Residential College 4, Cinnamon & Tembusu College, and Campus for Research Excellence and Technological Enterprise)

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DESIGN PERIOD:

2007

CONSTRUCTION PERIOD:

2011-2014 (by phasing)

AWARD:

Award of Excellence in 11th International Federation of Landscape Architects (IFLA) Asia Pacific Region Awards for Landscape Architecture, 2014



树木都被精心融合到了建筑及景观布局中, 而整个大学城周边的缓冲区也保留了原有的绿色植被, 并在空地之上重新种植树木 (均为当地珍稀物种)。所有以上策略共同促进了整体建成环境的形成。

共享的景观层

共享可理解为共有, 或彼此间互惠互

利, 或与他人共同使用或享受。我们可从功能、社会交往、文化、政策和环境等角度来对其进行探讨。

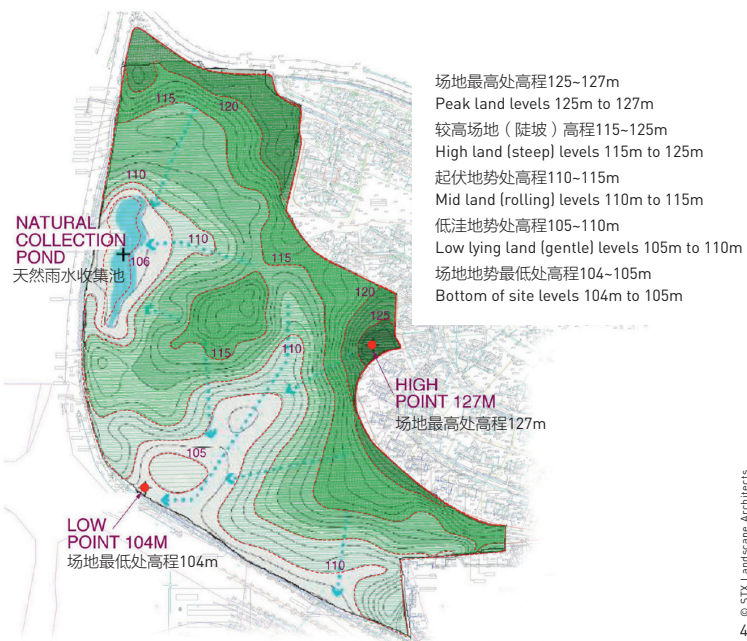
该项目中的景观设计力求通过对原有地形进行简单改造及利用原有树木, 来打造地标和共享空间。香灰莉木山即是其中一个具有代表性的景观, 其流线形阶梯状硬质景观形成了可用于聚会、探讨和社交互动的户外空间。就更大的尺度而言, 大学城中最主要

2. 大学城总体规划
3. 种植策略与场地中保留的树木
4. 场地地形分析

2. Overall plan of UTown
3. Trees to be planted and trees conserved
4. Landform analysis



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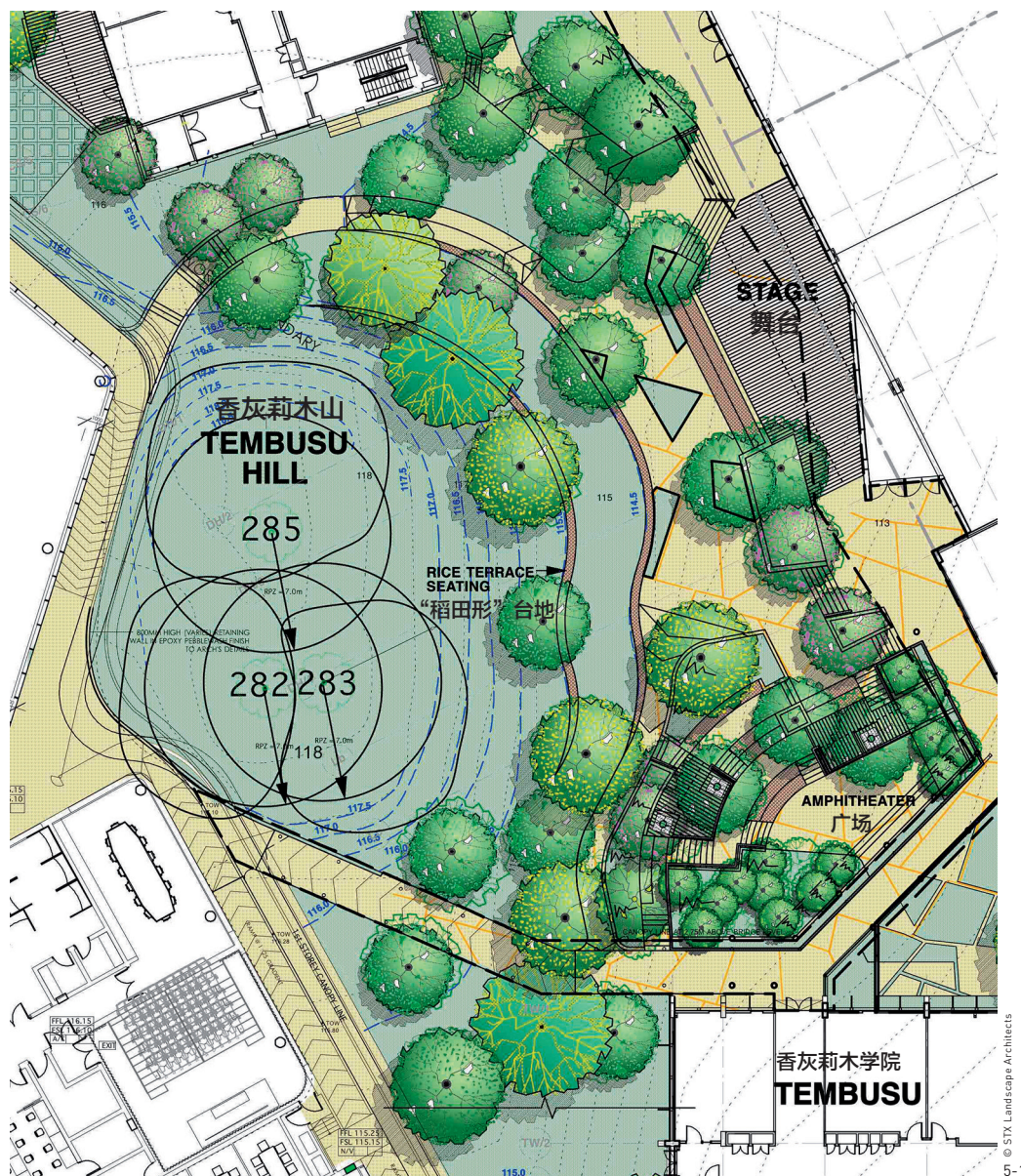
的开放空间是位于中央的大草坪，草坪周边保留有数棵大型树木，这里也是整个场地中最核心的、可用于集会或庆典的区域。大学城中丰富多彩的活动、多样化的功能与美好的憧憬带来了空间与社会层面的分层，而融合了原有树木与地形的设计、休憩和协作空间的构建则营造了小尺度“多样化”的共享。

分层设计中“由部分到整体”的多组分策略

桂树和香灰莉木寄宿学院建立的初衷是为学生提供更加私密、互动性更强且更加综合的学习体验，这种形式在亚洲地区较为新

颖。场地中共享景观的设计有利于促进互动式跨学科的教学与学习，同时加深个体间的关系。诸如“香灰莉木山和台地”一类的户外空间完美回应且契合了场地原有的地形，非常适宜小组间的学习，不论拥有何种民族或文化背景，都会在此产生共同的归属感。而在桂树寄宿学院的庭院及香灰莉木阶梯广场等每个学院中的“标志性户外空间”中均点缀着树木，繁茂的枝叶遮蔽了日光，令人感到惬意——这种开放式的学习环境凸显了新世纪的教育结构与期许。

除了在设计语言上的差异外，陈爱丽丝与彼德学院同桂树和香灰莉木寄宿学院一样为高大的观赏树木所环绕，为人们遮蔽了灼热的日光。椰子树——这一极具乡土特色的



元素令人联想起场地亚洲风情小镇的历史形象，也使得这片区域在大学城中独具一格。该场地将具有本土特色的景观设计融入整体环境之中，这也呼应了共享愿景。这里既能让人感受到时间的永恒之美，又为社交和娱乐活动提供了空间。通过景观设计，场地的轮廓鲜明地显现出来，构建了一处中央开放空间，这里机能的“稻田形”台阶可供人们或在摇曳的椰子树下穿行，或闲坐交谈。

大学城公寓的设计期望通过营造更加优

美而考究的环境，以形成有别于其他学院的特征，并突显研究生独特的成熟气质。雅致的环境使其成为了大学城中一处较为正式的场所。中央景观庭院连通起两座塔楼，贯穿上下两层，上层为汽车接客、下客区，下层则可通往中央大草坪。而在两座塔楼的每一个楼层亦结合地形设计了小型的庭院空间，以满足不同群体同时使用的需求。挑高的地面与半地下一层之间形成了良好的自然通风条件，这也是该项目中重要的环境

策略之一。

坐落于地势最高处的教育资源中心是大学城的核心，与场地中的其他组成部分形成了无缝的衔接。为保护树木资源，教育资源中心环绕原有的香灰莉木而建。全天候对外开放的优势更使其成为了大学城的活跃中心，这里有充足的学习空间，以及网络咖啡馆、阶梯教室和计算机室。在中心一层，下层广场中的网络咖啡馆通过景观的过渡，与阶梯状的草坪融为一体，直通不远处的大草坪，形成了连绵不绝

的狭长空间。教育资源中心采用了大面积的绿色屋顶设计，营造了相互交织的、具有流畅几何形态的绿色平台，它们将中央的开敞空间围合起来，原有的和新种植的树木生长于其中，连通起整个场地。屋顶花园更是共享的学习空间，这里既有充足的座位区域，也有攀爬了藤蔓的格子凉亭。

通过将室内公共空间与建筑外部不同的景观空间整合起来，斯蒂芬李文正中心实现了空间功能的灵活多样性，可在课堂与课余活动之间轻松转换。在中心一层有一处名为“会议广场”的开放空间，硬质铺装与半露天式的遮挡使得这里成为了与毗邻的大草坪气质截然不同的聚会场所。广场周边郁郁葱葱的树木将大草坪框入视野中，二者形成了一个有机的整体。而在斯蒂芬李文正中心的南北两端分别设有两个大型的弧形阶梯，其流线周边的景观融为一体，且实现了与教育资源中心及卓越研究与科技企业中心的贯通。

卓越研究与科技企业中心位于大草坪的最高端，这里保留了原有的紫檀树，大型的现代广场面向中央的绿色空间敞开怀抱。圆形露天剧场式的座位环绕这些高大且历经沧桑的树木而设，树木讲述并继续书写着原始场地的“历史”，与大学城主入口处具有浓重都市色彩的狭长花岗岩和弧形水景形成了鲜明的对比。

大草坪是整个场地中最主要的开放空间，除举办大型集会与体育活动外，也可支持校园中的高端联谊社交活动。其覆盖了大学城中大部分的重要建筑，并与之共同构成了大学城的主体，构建了既适宜学习与研究，又不乏娱乐与社交生活的全天候开放的整体环境。这是一个充满了自然气息且融合了多元化设计的聚会场所，不论是在其间还是在其周边，各类活动均适宜开展，种族、文化和国别间的差异因此而消融。大草坪中保留了5棵高大的成熟树木，成为了碗状草坪中的独特标志，营造了强烈的场所感。位于草坪最中央的一棵树木与其他4棵之间铺设了观景木台，浓密的树荫使得空间更加怡人，机电设施也可隐匿其中，保证了大草坪纯粹

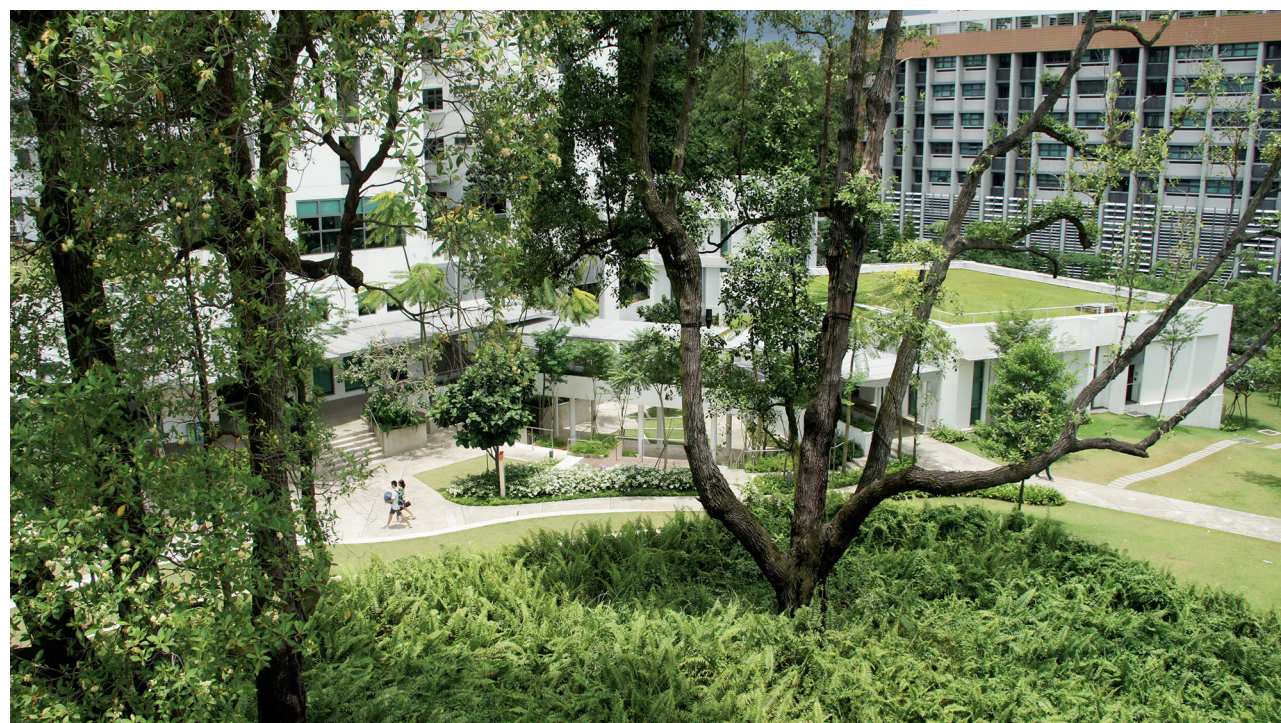
的自然气息。大草坪所具备的共享特征可通过多种主动或被动活动来实现：草坪中央可开展各类文娱活动或竞技项目；人们亦可在教育资源中心的台阶上席地而坐，或在大学城公寓的公共走廊漫步，或在斯蒂芬李文正中心的广场上集聚，或在大草坪中的观景木台上欢度时光。作为共享的景观，大草坪营造了多元的氛围，又将一切聚合为一体。

结语

为追寻卓越的设计，大学城项目突破了建筑与工程项目中所普遍遵循的基本原则及存在的限制，打造了能够满足人们最基本需求的场地——令人感觉愉悦、舒适且难忘。而该项目对于社交共享型场地营造中“永恒之美”的探索，更丰富了人们的生活体验。大学城的景观设计促进了人际交流，提升了



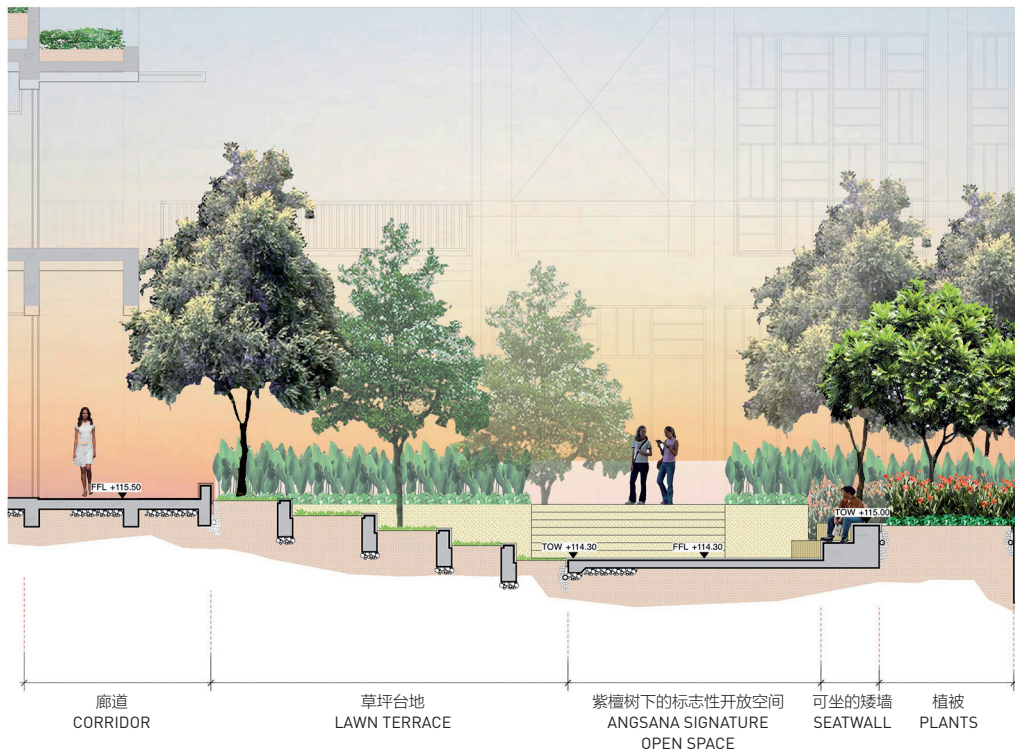
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学习效率，且这种具有美学效果的、能够激发创造力的“学习框架”更打破了传统的说教型教育模式，而鼓励学生通过文娱活动及参与式学习来分享知识。

为学习而打造的场所，以及为获得更好的学习体验而进行的景观设计，正诠释了“共享范式”的真正内涵。因此，一如大学城项目所呈现的，它实现了当代视角下一个完美整合的环境所应当具备的功能，设计方法、尺度及文化因素等方面促成了设计的分层以及不同景观层的共享。在这里，人们能够切实感受到共享最本真的含义——呼吸同一片空气、享受同一缕微风、沐浴同一抹阳光，这与手指间的“网络”分享截然不同。要实现这一真正的共享，需要通过精心营造的美丽空间来吸引、鼓励人们前往，而大学城项目的成功正在于此。**LAF**

The Case of University Town

The University Town (UTown) in National University of Singapore (NUS) is a new campus of the oldest university in Singapore, where the landscape design is about space and place making, with cultural and biological diversity contributing to conservation and social mediation.

As part of its growth, UTown was planned as an extension of the main NUS campus at Kent Ridge, physically separated by the Ayer Rajah Expressway with an overhead connection via a new pedestrian and vehicular bridge. The UTown site is approximately 19 hm², situated on the grounds of a former golf course with the undulating site topography forming the defining characteristic of the project. UTown is a collection of 6 different projects: Cinnamon and Tembusu Residential Colleges, College of Alice and Peter Tan, UTown Residence and Town Green, Education Resource Center, Stephen Riady Center, and Campus for Research Excellence and Technological Enterprise (CREATE).

The landscape architectural design approach is primarily about space and place making while respecting the natural contours of the site in order to conserve as many existing mature trees as possible. Tree conservation was a major driving force in the planning, design and execution of UTown. Significant mature and exceptional specimen trees in the interiors of the site were carefully integrated into the buildings and landscape layout while the strategy for the buffer around the whole UTown is that of preservation of indigenous existing greenery and its reforestation in bare areas, with 100% Native minimal species types, all of which contributed to the total built environment.

Shared Landscape Layers

Sharing can be defined as having in common; as having something mutual and

reciprocal; so as to use or enjoy something jointly with others. Sharing can be functional, social, cultural, political and environmental.

The landscape seeks to create landmarks and shared spaces by simple design enhancements to existing landforms and engagement with existing trees. Tembusu Hill is one such feature where hardscape terracing in fluid forms create outdoor spaces for gathering, discussion and social interaction. At a larger scale, the main open space for the UTown campus is the Town Green, also anchored by a group of large conserved trees, which functions as the site-wide central congregational and celebration area. At UTown the multiplicity of activities, functions and aspirations lead to spatial and social layering — of terrain with existing trees, of design with spaces to rest and collaborate — to create little “multiplicities” shared.

7. 椰子树是过去亚洲村庄中常见的植物，在陈爱丽丝与彼得学院外种植椰子树，营造了融于整体环境中的具有本土特色的景观层。
8. 陈爱丽丝与彼得学院场地剖面图
9. 教育资源中心屋顶花园是共享的学习空间，这里有充足的座椅区域，有攀爬了藤蔓的格子凉亭。

7. Ubiquitous with local Asian villages of the past, the Coconut Palms planted outside the College of Alice and Peter Tan create a layer of local vernacular sensibility woven into its environment.
8. Site section of the College of Alice and Peter Tan
9. The roof garden of ERC is shared study space, incorporating seating areas and vine covered trellises.





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A Multi-Part “Component-to-the-Whole” Strategy to Layered Design

Cinnamon and Tembusu Residential Colleges (CT) was intended to embrace the pedagogical shift towards a more intimate, interactive and integrated learning campus experience, which is relatively new to Asia. The shared landscape was designed to create spaces conducive for interactive inter-disciplinary teaching, learning and development of enduring group relationships. Outdoor areas such as “Tembusu Hill and Stage” were created for groups where site specificity respects and integrates the existing contours to inculcate a shared belonging to place regardless of ethnic or cultural origins of the users.

Within the outdoor rooms of the Cinnamon courtyard and the Tembusu Amphitheatre, these “Signature Open Spaces” for each college, interspersed with trees providing shade and comfort, were designed to accentuate the new century’s educational structures and ambitions.

In much the same way as CT, the College of Alice and Peter Tan has outdoor spaces crowned by large, ornamental trees, providing shade and relief from the tropical sun with the only difference being in design language. Reminiscent of an Asian village, this area of UTown is distinguished by a language vernacular / local in style. This is reinforced through the planting of Coconut Palms ubiquitous with local Asian villages of the past. Thus, in addition to CT’s sharing

intentions, the College of Alice and Peter Tan has a layer of local vernacular sensibility woven into its environment as an element to be shared. Altogether, it exudes a sense of grounded timelessness, while encouraging social and recreational activities. The landscape design makes visible the contours of the site, creating a central signature open space of organic “paddy-field” steps, which serves as informal shared seating spaces, winding through swaying palms.

UTown Residence was designed to reflect the advanced and mature nature of the graduate students by creating a more polished and cultured environment, with its own unique identity different from the other colleges. An environment with graciously designed spaces creates a formality for the

10. 通过将室内公共空间与建筑外部不同的景观空间整合起来，斯蒂芬李文正中心实现了空间功能的灵活多样性，可在课堂与课余活动之间轻松转换。
 11. 在中心一层有一处名为“会议广场”的开放空间，硬质铺装与半露天式的遮挡使得这里成为了与毗邻的大草坪气质截然不同的聚会场所。
10. The Stephen Riady Center has a flexible network of spaces and porous adjacencies for easy transitions between classes and activities by integrating internal public spaces with the different external landscape spaces surrounding the building.
 11. The Forum, an open plaza as an alternative hard-paved gathering point to the Town Green with semi-weather protection.

project within the larger UTown campus context. Two towers are connected by a main central atrium landscape courtyard that spans two levels, opening onto the Town Green at the ground level with the upper level a drop-off and receiving area for car arrivals. Within both towers, smaller courtyard spaces have been designed at different levels following the ground terrain resulting in the possible of the overall courtyard capable of being shared by several groups at the same time; going from a raised ground level to a semi-basement level also as part of a specific environmental strategy of drawing natural air through the ground spaces of the project.

As the central focus of UTown, the Education Resource Center (ERC) building is situated on a high point where the design seamlessly knits the different terrains and boundaries of other parcels. The ERC building “wraps” the existing Tembusu trees within the embrace of the building. As a primary activity generator for the UTown campus, the ERC is 24/7, surrounded with study spaces, e-Café, lecture theatres and computer labs. At ground, the landscape integrates the lower plaza of the e-Café

into the green embrace of grass terraces, stepping down to the Town Green, in one grand sinuous sweep. The ERC has extensive Green Roofs, accentuating an organic yet geometric flow of green platforms slipping and sliding into each other, surrounding the central void from which existing and new trees emerge as a connection to the site. The roof garden is also a shared study space, incorporating seating areas and vine covered trellises.

The Stephen Riady Center has a flexible network of spaces and porous adjacencies for easy transitions between classes and activities. The landscape facilitates this by integrating internal public spaces with the different external landscape spaces surrounding the building. At ground, an open plaza named The Forum, visually and physically connects to the Town Green as an alternative hard-paved gathering point to the Town Green with semi-weather protection. Organic clusters of trees within The Forum frame views out to the Town Green and creates a dialogue. At the ends, two grand staircases curved in form, fluidly integrates into the landscape at the North and South ends of the complex, linking to the ERC and





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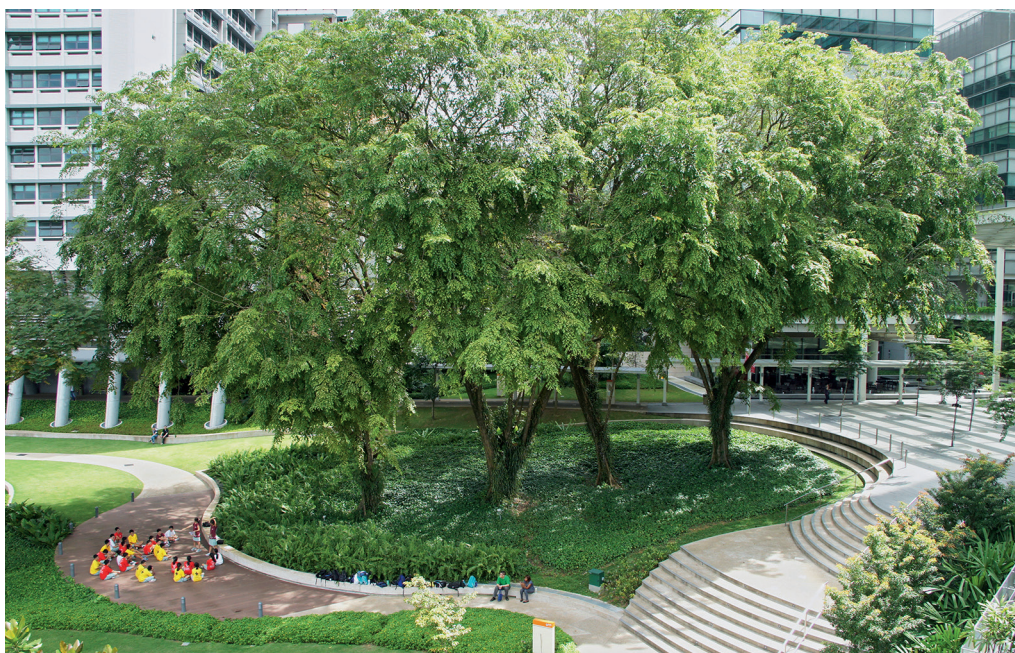
to the Campus for Research Excellence and Technological Enterprise (CREATE).

CREATE perched at the tip of the Town Green where the conserved Angsana trees anchors this space, has a large contemporary plaza that opens up to embrace the majesty of the shared central green space. At this tip, the amphitheater-style seating rings the huge heritage trees — a manner of sharing in, and being a part

of the saved “history” of the original site, before the transition into the strong urban character of the long granite pieces and arching water features that represent the main town entry of the site.

The Town Green is the major open space for congregation and active play for the whole site, supporting high levels of social interaction across campus. Of the 6 major parcels of UTown, it anchors 4. The Town

Green forms the heart of the campus and together with other parcels make possible a holistic environment for study education and research, side by side with leisure and social living, 24/7. As a natural gathering point pluralistic in design, it generates and celebrates the activities within and around it, melting racial, cultural and nationalistic boundaries. 5 large mature trees preserved and integrated within the Town Green



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landscape design result in an anchoring counterpoint for the vastness of the bowl-like Green, creating a strong sense of place. Within a gap between the roots of the last mature tree and the other 4 trees, a timber deck was inserted for users to benefit from the dense shade, as well as being concealment for M&E services, so that the verdant green surface of the Town Green lawn would be pristine. The sharing of the Town Green is manifold and varied, in both active as well as passive ways. The green center is a stage where activities and play happen and where crowds hang on the edges; or sitting at the terrace of the ERC or moving along the public corridors of the UTown Residence; or gathering at the paved plaza of the Stephen Riady Center; or meditating at the outdoor deck in the Town Green. As a shared environment, it supports divergence as much as convergence.

Conclusion

The search for design excellence at UTown was achieved in rising beyond

mundane fundamentals, constraints of architecture and engineering, to result in a landscape that would nurture the basic human need for joy, comfort and a memorable sense of place. Our search of “timeless beauty,” which as a

socially shared enterprise, also elevates the journey of life. It is a design that promotes interaction and memorability, and enables the sharing of knowledge by creating opportunities for recreation and engagement within a “learning framework” that is aesthetic, entices curiosity, and not overly didactic.

Places of learning and the landscape design which supports this learning, is the ideal environment where a “sharing paradigm” manifests. Therefore, as realized, UTown functions as a fully integrated environment of contemporary dimensions where approach, scale and cultural references contribute to design layering and the sharing of these layers. The actual tactility of interpersonal sharing at its fundamental level is meaningful and real — breathing the same air, enjoying the same breeze while in the shade from the same sun — as opposed to arm’s length “web” sharing. This sharing ultimately requires beautiful spaces to entice, encourage and foster, and the built project at UTown achieves this. **LAF**

12. 大草坪是整个场地中最主要的开放空间，除举办大型集会与体育活动中，也可支持校园中的高端联谊社交活动。
13. 位于草坪最中央的一棵树木与其他4棵之间铺设了观景木台，浓密的树荫使得空间更加怡人。
14. 草坪中央可开展各类文娱活动或竞技项目。
12. The Town Green is the major open space for congregation and active play for the whole site, supporting high levels of social interaction across campus.
13. Within a gap between the roots of the last mature tree and the other 4 trees, a timber deck was inserted for users to benefit from the dense shade.
14. The green center is a stage where activities and play happen and where crowds hang on the edges.



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