武进凤凰谷

Phoenix Valley in Wujin

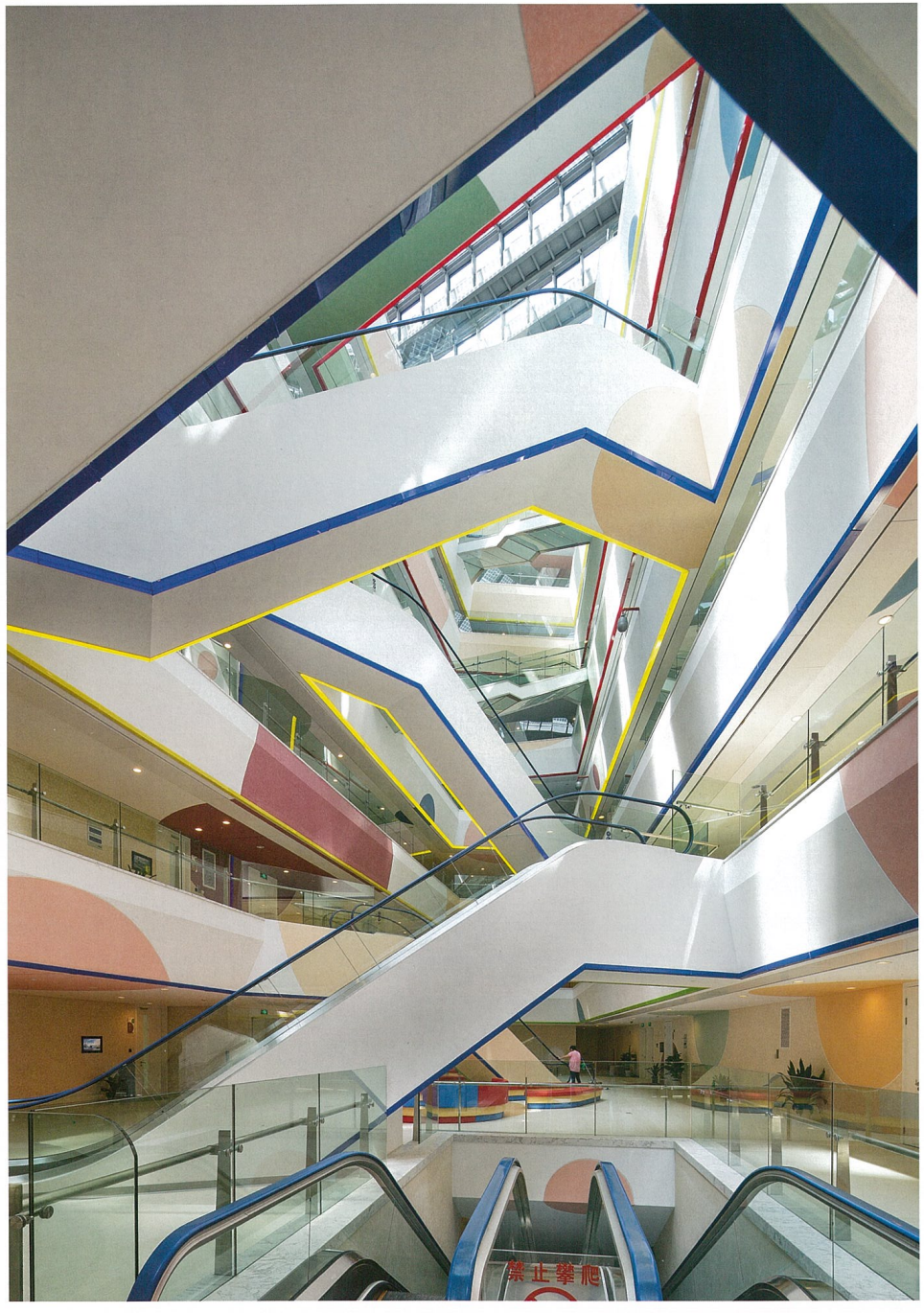
建筑师：studio505
甲方：Wujin District People's Government
本地设计院：Nanjing University Design Institute
施工：Shanghai Construction Group
室内承包商：Gold Mantis
摄影师：John Gollings

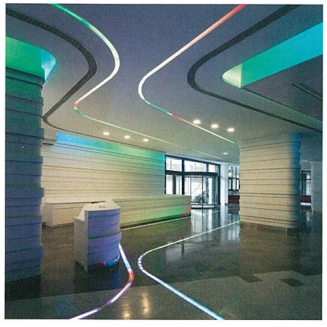
凤凰谷是由政府投资建设和运营的影剧艺术中心。设计任务书原本在场地上进行了精确的分区，使得很多设计师都倾向于避开矩形建筑占地地块前一条以钝角右转弯的水道，并将地块的前方或一侧留为广场用地。而本案建筑师却打破了这种分区方式，将水道引到场地内部，使其成为一个在一片如山的绿色屋顶建筑体块中“切割出”一个“峡谷空间”的主动元素。这样的设计模式营造了一个受保护的内部庭院空间，一个内化的户外中央聚会场所，它使建筑与繁忙的道路隔开，形成了一个公共空间，既能看到建筑外墙上大屏幕上的内容，又与建筑中所有的重要场所相连。

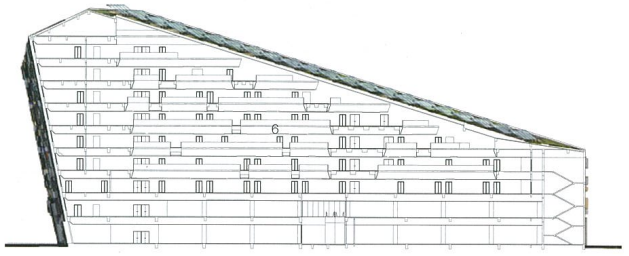
项目包含：既独立运营又属综合整体的四家电影院；能容纳1000人的大剧场，既可演出中国戏剧，也能举办以高科技数字技术为背景的表演；五层高的功能灵活的艺术画廊；可容纳4000名学生接受教育的青少年宫（学习中心）；职业体验厅、体育馆和舞厅；零售店、咖啡馆和小吃配套及儿童游乐场、景观庭院和LED大屏幕。

这个综合项目占地65 000m^2，建筑师在其中嵌入了在一个小项目——Pixel大楼中开发和测试得出的技术、思维和设计流程，包括绿色屋顶技术、内置光伏发电（BIPV）和太阳能热电电池板、自然通风、LED照明以及复杂的水资源管理系统，后者包括利用流经项目下方的水体来进行热交换的热交换器。该项目获得了中国绿色建筑三星认证的最高级别，相当于Greenstar的5或6星级、LEED的金奖。

青少年宫的内部设计很了不起：中空的7层体量，点缀以自动扶梯和循环楼梯，给传统上严格分离的功能空间创造了交融的机会，让学舞蹈的学生接触机器人实验室，让古典乐器班与学计算机编程的学生混合。其设计目的是形成一种文丘里







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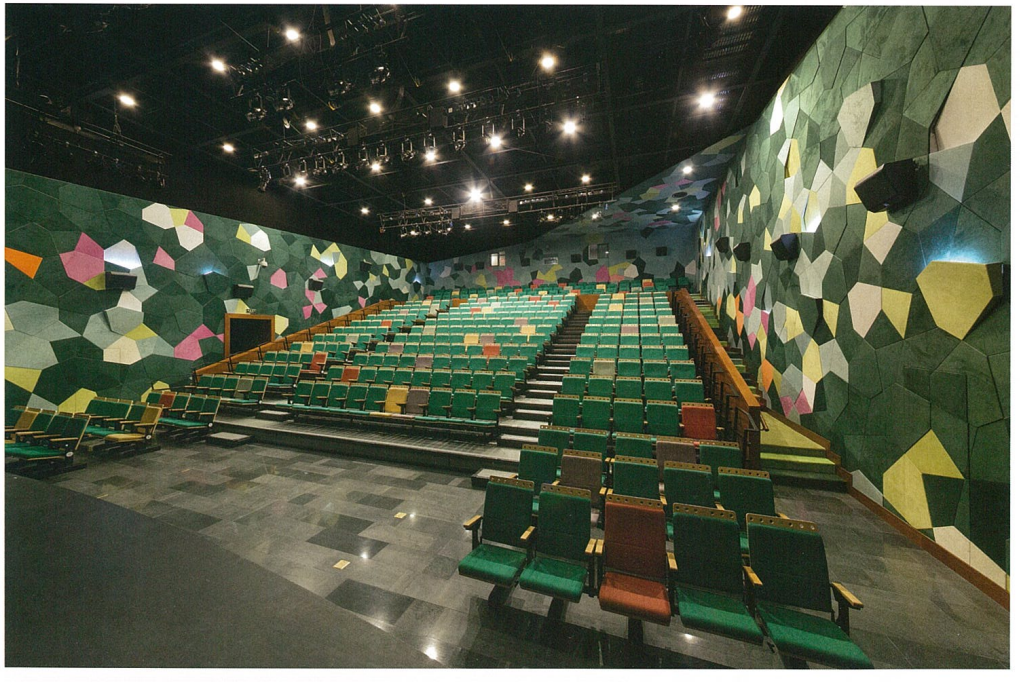
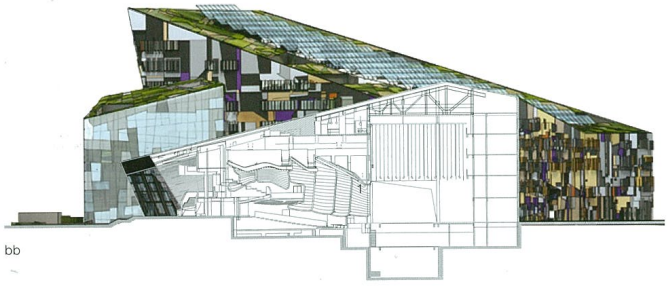
烟囱式的结构，教室通过外墙进行通风，新鲜空气从中庭这个天然的通风管道进入室内，再通过可开关的屋顶天窗排出。此外，整个天窗均由外层的光电太阳能电池板遮盖，电池板功率为832kW，年发电104MWh，每年可减排约114t二氧化碳。

整个屋顶都根据立面图案种植，选取完整的季节性开花品种，形成了绿墙。这种屋顶在保温、集水、过滤及减少热岛效应等方面带来了巨大的效益，改进了当地房产的舒适度，提升了价值，打造了一个深受人们喜爱的社区中心。 刘慧 译/方柘 审

The project of Phoenix Valley is a theatre, film and arts centre which is funded and operated by the local government. The brief proposed a strict zoning for the site which directed all designers to divert an axial canal in a blunt right hand turn across the front of a basic rectangular building footprint, and left open the option of a square to the front or the side. The architects broke this zoning and instead proposed that the canal be drawn into the site, becoming the active element that has carved out the valley from a green roofed mountain mass. This gesture created a protected internal courtyard space, an internalized yet outdoor central gathering space secure from busy roads, allowing a public space, which created a connection to the big screen and access to all the parts of the centre from within the valley. The complex is comprised of a series of independently operated, but integrated programmes of 4 cinemas; a 1000 seat grand theatre, which is capable of both traditional Chinese opera and radical digital immersive performances; a five-storey flexible art gallery; a youth palace (learning centre) to accommodate and educate 4000 students; an occupation experience hall, a sports and dance hall; a selection of retail, café and food facilities and a connected and permeable children's playground,





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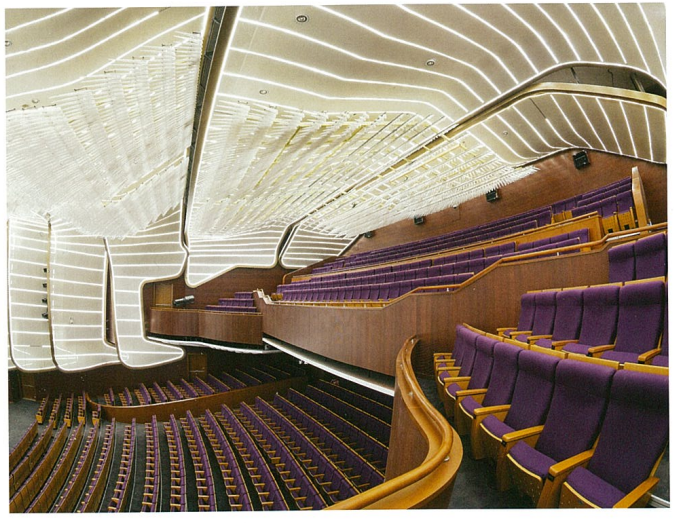


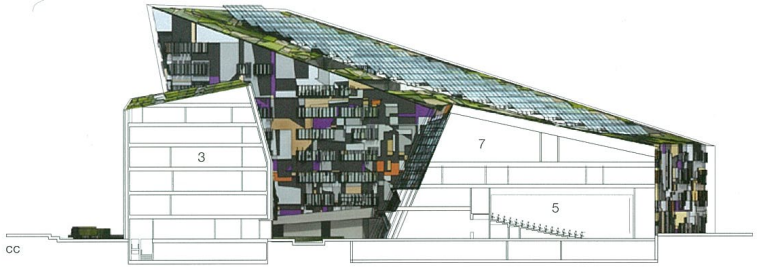
landscaped courtyard and large format LED screen.

It is a comprehensive project. Within its total area of 65,000 m^2, the architects have embedded technologies, thinking and design processes developed and tested in the much smaller Pixel building, in Melbourne. This is comprised of Green Roof technology, Built-In Photovoltaic (BIPV) and Solar Thermal arrays, natural ventilation, LED lighting and sophisticated water management systems, which include thermal heat exchangers with the canal waters flowing through and beneath the project. The project has achieved the certification of the maximum 3 stars available under China Three Star rating, which is the equivalent of Greenstar 5/6 star, and LEED Gold.

The Youth Palace space is a remarkable interior – a hollowed out 7-storey volume interspersed with a collection of escalator and stair loops, that create a cross pollination of the traditionally rigid and separated programme, forcing dance students to mingle with robotics labs, and ancient musical instrument classes to mix with computer programming students.

The entire volume is designed to form a venturi chimney, with classrooms able to operate ventilation to the outer wall, and have fresh air drawn through the natural thermal stack of the atrium to vent through the operable skylight roof. Further, the entire skylight is shaded with an outer layer of BIPV solar panels that have a capacity of 832 kW and generate 104 MWh per annum, offsetting around 114 tonnes of CO_2 per annum.

The entire roof of the project is planted to follow the patterns of the facade, with species that create an active and integrated seasonal flowering variety that flows down the green walls. This roof provides significant benefits to the project in terms of insulation, water collection & filtration and reduction of a heat island effect. The project has improved amenity, improved local value of real estates, and formed a highly regarded and awarded hub for the local community.



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