

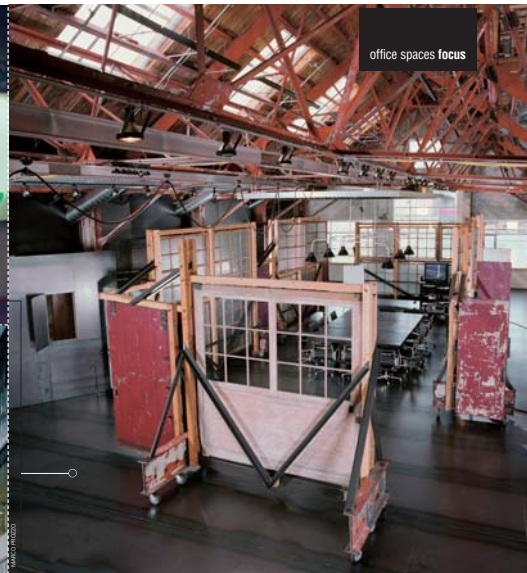
Thinking space

With their book *Space to Work* just published, **Philip Ross** and **Jeremy Myerson** offer an insight into their theory of how the spaces occupied by knowledge workers are evolving, and ask if they are changing fast enough to accommodate expectations

The spaces in which we work are changing to suit the type of work we do now. Much of the repetitive, linear, process-driven work that used to occupy vast numbers of office workers is done by computers. Consequently, the contemporary workplace is increasingly the setting for a new type of work that is far removed from the repetitive tasks characterised by time-and-motion studies.

The most common term for this new type of office work is 'knowledge work', and it is now the dominant mode of working in most of the world's advanced economies. Knowledge work depends on applying considerable theoretical knowledge and learning. It is based much more on the shared working practices of collaboration, initiative and exploration, in which knowledge is often implicit. Most knowledge workers today, however, still struggle in outdated physical environments and organisational structures that belong to a bygone era.

Knowledge workers identify themselves by their knowledge rather than by their corporate rank in an organisation. They



Academy: the learning campus

Academy describes a corporate office in which knowledge is most easily shared among colleagues in a collegiate learning environment. This trend signals a return to the values of Plato's academy of ancient Athens, the forerunner of the modern university as a place of philosophical and scientific discussion. But for the academy's formal architectural expression, we must see the first Oxford and Cambridge colleges of medieval England, whose corporate way of life spun around a quadrangle and included hall, chapel, library, warden's lodgings and rooms for students and fellows.

Today, many of the spatial principles and productivity benefits connected with training, mentoring, sharing of ideas and research are finding their way into the corporate campus. Corporations are also increasingly keen to locate close to universities and their incubator start-ups. This approach subscribes to current management theories such as those of Henry Chesbrough, of the Berkeley School of Business, on 'open innovation'. Chesbrough sees companies as reinventing their processes from closed to open, relying more on external knowledge sources because, says Chesbrough, 'distribution of

knowledge has spilled out well beyond central research labs to other companies, customers, universities, national laboratories, etc'.

The proximity of biotech company Genzyme (pictured left) to the Massachusetts Institute of Technology is a clear expression of this. Genzyme's activities revolve around a magnificent open atrium which brings in natural light and greenery. This luminous space becomes a metaphor for sharing knowledge. What characterises the academy workplace is the conscious desire for cross-pollination of ideas among knowledge workers, whether they are sitting around one continuous concrete table in Clive Wilkinson's scheme for advertising agency Mother in London (which jointly won last year's FX Awards Office of the Year) or sharing unpredictable public and social spaces at Dutch insurance company Interpolis (pictured above left).

In shaping the academy ideal, some projects use metaphor on a monumental scale. Seattle advertising agency Sedgwick Rd (pictured above) uses the language of architectural salvage to express the idea of creative advertising as a constantly recycled work in progress.

Guild: the professional cluster

Guild describes a new type of workplace that brings together people with a shared professional skill or specialism. This trend signals a return to the idea of the medieval craft and merchant guilds that developed and occupied the first commercial buildings in many European cities and were, in many senses, the precursors of the modern corporation. Guilds or 'mysteries' represented the ancient professions and crafts, such as the mercers, goldsmiths, clothworkers, salters and skimmers.

The industrial revolution led to the demise of the guilds, and their privileges were withdrawn in England, Italy, Germany and cities in other European countries during the 19th century. But in the age of the 'post-industrial' office, the idea of the guild is being revived. Not only that, but new guilds are

springing up, reflecting new professions such as chartered secretaries, chartered accountants, insurers and engineers. No fewer than 25 new guilds have been created in the UK alone in recent decades.

Medieval guilds traditionally brought professional peers into regular contact with each other and helped to build knowledge and networks in a specific field. The guild-style workplaces shown in the book *Space to Work* seek to reaffirm the importance of such activities.

The Max Planck Institute of Molecular Cell Biology and Genetics in Dresden (pictured) subscribes in its creation of community to the belief that a problem shared is a problem solved. Dialogue, communication and contemplation are at the very heart of the design schemes.

• belong to a profession rather than the company, and they are always looking to add to their knowledge.

In this context, inflexible and hierarchical environments are simply out of date. Encouraging highly valued and well-educated older workers to remain at work for longer will require a new, more flexible and friendlier type of workplace, one that reconciles the tensions between life and work.

Productivity of the manual worker increased roughly 50-fold during the 20th century through changes in factory design, but can we be confident that knowledge-worker productivity will make similar advances in the 21st century through changes in office design? How much do we really know about the work settings that knowledge workers require for them to be effective?

The answer, according to an influential paper in the MIT *Sloane Management Review* entitled *The Mysterious Art* and

• Science of the Knowledge-Worker Performance (autumn 2002), is not a lot. The American authors, Thomas H Davenport, Robert J Thomas and Susan Cantrell, point out that companies today are experimenting heavily with workplace redesign but are not learning very much in the process. According to Davenport et al, workplace design is a key determinant of knowledge-worker performance, but we are still in the dark about how to gear our offices to the demands of knowledge work.

Frank Duffy, chairman of architectural practice DEGW plc Architects and Consultants and a leading theorist in the area, confirmed these views in a British report commissioned by the Commission for Architecture and the Built Environment in which he candidly admits that early 21st-century architects currently know as little about how work environment shapes business performance as early 19th-century physicians did about how diseases were transmitted prior to the



office spaces focus

Lodge: the live-work setting

Lodge describes a new building type which combines living and working. It reconnects the spheres of home and work that were severed by industrialisation. The earliest lodges were homes, dens, meeting halls and inns, primarily domestic but with other functions incorporated. Countless business deals in agrarian societies were made over the kitchen table and, from the early 19th century onwards, many banks and shipping companies started life inside the bourgeois townhouses of their owners. Only later would patterns of suburbanisation and commuting to high-rise business districts emerge to drain the home of economic activity, leaving merely a place of consumption, beautification and escape from work.

A combination of factors these days is encouraging people once again to live and work in the same setting. The desire by local authorities to attract economically productive people back into run-down urban areas has relaxed planning policies and triggered the supply of live-work property.

Purpose-built live-work units, like the East Union Lofts in Seattle (above), offer a lot in terms of space and create stylish modern settings. The Katsan Office Building by White Architects (left) is a clever example of a workplace blending into a new dockside residential district in Stockholm, but more commonly the workspace is integrated into a single inspirational private residence.

Agora: the public workplace

Agora describes a public workplace that is integrated into the life of the city and brings the company closer to its customers and markets. This trend signals a return to civic values of work and derives from the ancient Greek marketplace or agora. This was originally a place of congregation that quickly became the destination for trade and commerce. The Greek agora evolved into the Roman forum, which today is synonymous with the process of meeting. So this theme today represents the growth of mobile working and the ability of knowledge workers to be effective in the marketplace and close to their customers and suppliers.

Being in the market will increasingly become a feature of 21st-century working and, in response, new workplaces for people who need an ad-hoc environment for occasional or spontaneous use 'on the pause' will become commonplace. Similarly,

office buildings will increasingly take on a public face, raising corporate presence through shared or mixed-use spaces. One tactic is the integration of new workspace for commercial organisations in historic public buildings. Another form of urban intervention is the corporate commissioning of landmark art and architecture. Foster's dynamic scheme at 30 St Mary Axe in the City of London for Swiss Re has created an instant icon for the capital.

While companies aim to shape their own agora-style workplaces, their mobile employees are seeking out public venues that enable work, such as the Porta22 career information centre in Barcelona (below) and the Academy Hills Roppongi Library in Tokyo (inset above right). These projects deliberately plan for an exchange of knowledge. Agora-style workspaces are also adept at transformation, changing their mood from day to night and staying in action 24 hours a day, just like the city itself.



◀ **Space to Work** by Philip Ross and Jeremy Myerson is published by Laurence King, C&S

• science of epidemiology being established. We have identified four 'realms' of knowledge work: the corporate realm (or academy); the professional (guild); the public (agora); and the domestic or private (lodge). It is our contention that knowledge workers will increasingly seek to achieve a balance between four conflicting sets of relationships: colleagues in the employing organisation; professional peers; customers in the marketplace; and friends and family in the home.

Work itself will spread across a continuum of locations: corporate campus, city, home and settings for professional associations, and networks. In this context, organisations will need to develop workplace strategies that give their knowledge workers – who form a more mobile, self-assured and better-educated class of worker than ever before in the history of the office – more choice in where and how they work, so that they can reconcile the tensions in their working lives. **FX**