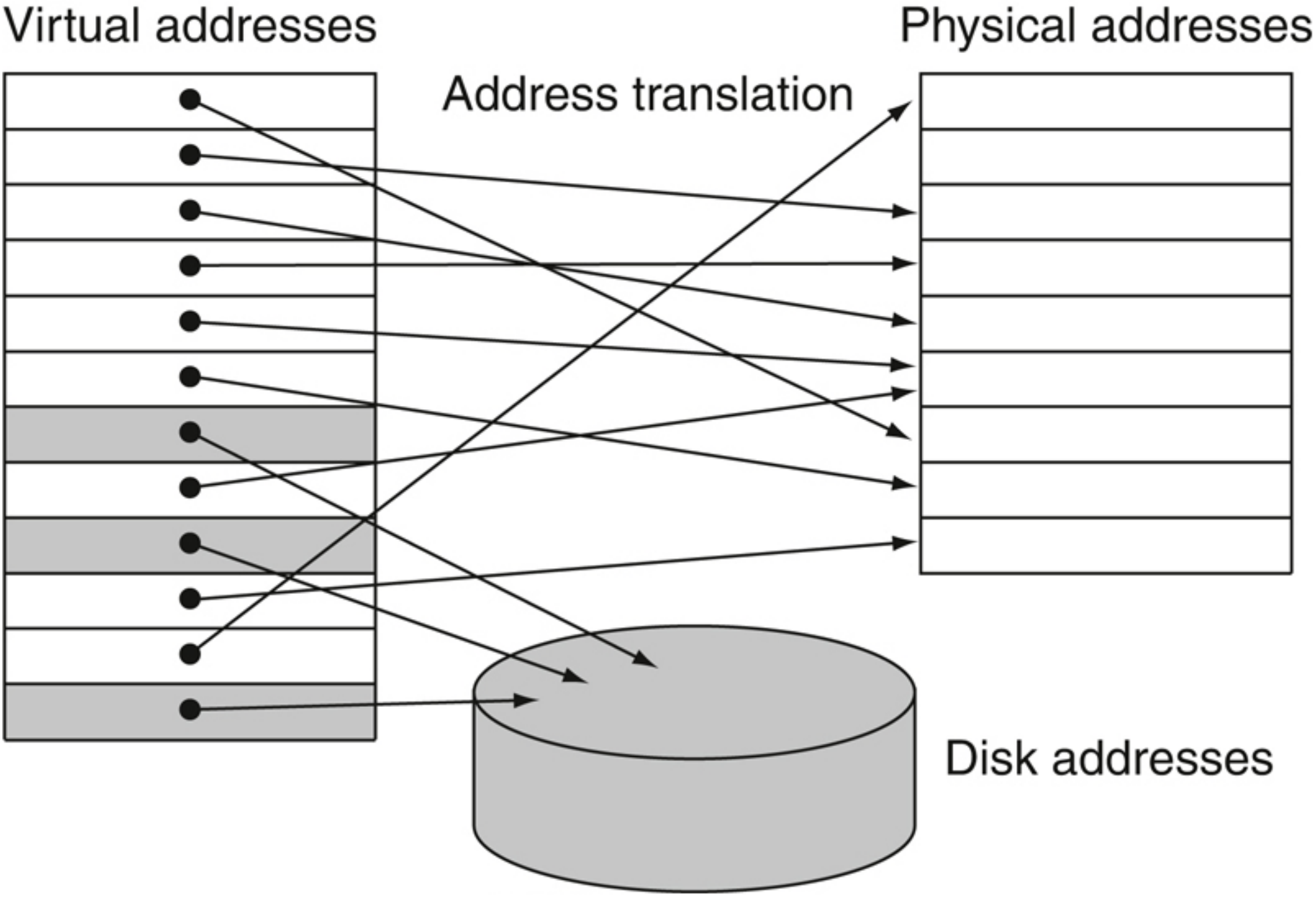

FIGURE 5.24 In virtual memory, blocks of memory (called *pages*) are mapped from one set of addresses (called *virtual addresses*) to another set (called *physical addresses*). The processor generates virtual addresses while the memory is accessed using physical addresses. Both the virtual memory and the physical memory are broken into pages, so that a virtual page is mapped to a physical page. Of course, it is also possible for a virtual page to be absent from main memory and not be mapped to a physical address; in that case, the page resides on disk. Physical pages can be shared by having two virtual addresses point to the same physical address. This capability is used to allow two different programs to share data or code.