animent. Sound has t enables individuals to inhabit, but it can also of the subject. Hence late the polyphony of

ace and render it private. wnership, and propriinglishman's home is his ographically identifiable om the prying eyes of curtains. Less successful Britain, for example, an bout the noise of neighsounds entering into re is virtually no defense private space. Defense iditory envelope-not sound technologies pering rooms, using digital ets. We sit contentedly es more like the "real inual dialogue with this nto multiple listening paces become smaller in the 1930s to combat ned.1 Yet with all the ation, we are making British cities is measured ith 32 million citizens ests one's notion of the oise complaints in Britain ames our efforts to create the music and people we ls to our ear. to how it makes itself selves individually, then ry, and changing nature

miry:

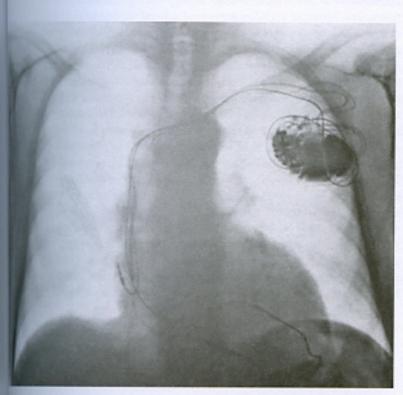
a compelling concern.

in America, ise Survey

## biomimetics

We think we know what distinguishes a mechanical from a biological process—but increasingly these ostensibly separate domains have permeable boundaries. Their interpenetration characterizes the new discipline of biomimetics.1 Chemistry, molecular biology, information processing, communications, robotics, design, and architectural practices are all working to merge the organic and the mechanic. The cutting edge of this research (especially at the nanoscale) often aims to augment or replicate existing biological functions. Hence the term biomimesis. The problem, as artists have long recognized, is that replication itself changes our experience of the results. Mimesis stands in for an aesthetic, not a prosthetic relation to the body.

If prosthetics increasingly amplify the body rather than attempting to mimic original forms or functional limits (see "Prosthetics"), what is the role of mimesis in the discipline of bioengineering? One suspects that part of the job done by "mimetics" here is to neutralize some of the anxiety that has always attended the machine/human interface by giving the machinic phylum a familiar feel.2 Certainly engineers assume that at least some of the widespread fear about machines "taking control" of our lives (as measured by Hollywood: Terminator, Robocop. Matrix, War of the Worlds) is due to the alienating inadequacy of existing interfaces; thus they work to produce ever



X-ray image of human chest showing internal delibrillator one month after implant and attachment to the cardiac muscle.

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