

### Issue 50

## Convection

Hundreds of years ago in primitive societies in cold climates, people kept warm by huddling together around an open fire in the center of their living quarters. Above the fire, a hole in the roof let out some of the smoke and a good deal of the heat.

In the ninth century in Europe, it was found that a properly designed fireplace and chimney created a convection current that carried away all the smoke and, by radiation from the fireplace walls, increased the heat to the room. Small fires could be built *anywhere* in a multi-story building, which encouraged the subdivision of living quarters. Privacy and social divisions were enhanced.

It has been said that the invention of the chimney may have affected the art of love in medieval Europe more than the troubadours did. It certainly isolated a lord and his lady in their "withdrawing room" from the rest of the household, increasing class divisions.

In William Langland's *The Vision of Piers Plowman* (fourteenth century):

Woe is in the hall each day of the week.  
There the lord and lady like not to sit.  
Now every rich man eats by himself  
In a private chamber to be rid of poor men,  
Or in a chamber with a chimney  
And leaves the great hall.

Has modern central heating reversed the fragmentation of a family household? Is television a modern parallel?

(From an untitled review article, Lynn White, Jr., *Isis* (75) 1:276  
[March, 1984], p. 172 et seq.)

The family refrigerator is another application of technology that has had profound effects on family life. Its invention has made daily trips to the corner market (as our grandparents did) unnecessary; it also has kept us from having to make contact with our neighbors. Taking away a common ground on which people used to meet daily, the refrigerator has helped isolate us even more from one another—as television does.

***Think about this . . .*** “For profit” hospitals are basically businesses. Should they be required to accept indigent and uninsured patients?

*Should citizens, although not specially trained in science, have the authority to vote to halt scientific research that is believed to present possible hazard to human life?*

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