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Editor Address:

Polish Academy of Sciences

Office for Popularizing and Promoting Science

PKiN, pl. Defilad 1, 00-901 Warsaw, Poland

e-mail: academia@pan.pl

www.academia.pan.pl

Subscription:

academia.prenumerata@pan.pl

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From Academia

The Ties That Bind

We humans are related to millions of other organisms now living on the Earth, as well as to billions of others that have died out – notes this issue's intriguing interviewee Prof. **Zofia Kielan-Jaworowska**, the “Polish Nobel”-winning paleobiologist (p. 40). Indeed, everything in the natural world is interlinked and interconnected, and science seeks to tease out such relationships and dependencies. For example, on p. 24 we describe how some types of **butterflies** are unable to develop unless they get “adopted” by specific types of ants. Bats, in turn, **band together** to form the planet's largest groups of vertebrate animals, and on p. 4 we investigate whether the members of these large colonies share strong and lasting bonds. Research on birds has shown that many chicks of socially monogamous species result from extra-pair mating – does that mean their social partners are not always the genetically ideal choice? The possible motivation for such avian infidelity is explored on p. 32.

Some of the tightest bonds can be found between twins, who share not just the same pool of genes but also grow up constantly at each other's side. Our article “**The Twin Method**” (p. 20) talks about why twins are such an intriguing subject of research and what science can learn from them. On p. 16 we try to answer the question of how the situation faced by Poland's intelligentsia in 1918 is linked to that of 1989, thus raising a broader question: How do intellectuals behave after a country regains its freedom?

Today's world is crisscrossed with borders, but here too the time has come to think in terms of global connections and interdependencies. Atmospheric pollution, for instance, knows no borders – “**Traveling Toxins**” speaks of common efforts to fight it (p. 35).

A different kind of dependency is involved in addiction, when people become dependent upon alcohol or cocaine, eating or shopping. The mechanisms underlying all such addictions turn out to share a psychoneurological basis with learning and memory (p. 12).

Lastly and notably, this issue's Insight section profiles two extraordinary figures with names linked to world-class research: the recently departed Prof. **Leszek Kołakowski** (p. 48), who was a fan of *Academia*, and last year's Nobel laureate Prof. **Harald zur Hausen** (p. 46).

ACADEMIA staff



Piotr Komorowski, from the cycle “Perceptions” 1990, private collection

Piotr Komorowski (born 1955), is a Polish artistic photographer, teacher, and critic. In the 1980s and 90s he was affiliated with the elementary photography movement, a pure form of photography stressing its visuality and distinctness from other forms of art. Since the late 90s he has been exploring staged photography