Why do some birds hop and others walk?

An old enquiry which still evokes considerable speculation. It may well be that birds who habitually perch in trees will habitually hop should they be on the ground. They have to hop whilst moving from branch to branch and that habit persists on the ground, of course! What about the length of their legs? Observation tells us that long legged birds will walk... short legged birds hop. Clear examples are the water birds... long legs to enable wading, and walking is the method of locomotion. Sparrows are the short legged variety... and hop they do!

But I enjoy the thought proposed by a Scottish correspondent...he claims it is to do with the size of their brains! Smaller birds have less grey matter, so walking is beyond them! True, walking demands extraordinary combinations of neuromuscular control. I am reminded of a famous lecture delivered by the late Professor Phillip Tobias. Dealing with human walking, he succinctly summarised our efforts... “The tottering biped”!

Serious opinion relates hopping and/or walking to considerations of energy and efficacy. Hopping may consume more energy but is generally faster than walking... except when the bird is a ground dweller such a guinea fowl whose strong legs make running efficient... and less energy consuming than flying. Yes, let’s accept that the bird instinctively chooses the mode of locomotion best suited to the circumstances and with the least energy demands.

It is now only a short hop – or flight (!)- to Dentistry, which is also, intellectually and instinctively, seeking greater efficiency and enhanced conservation of energy. That is the essential principle underlying contemporary dentistry. Prevention of debilitating disease, achieving maximum health and efficacy of oral function. All ideally to be achieved with the greatest expedition. Worldwide, the 20th March will be marked the World Oral Health Day. Members may recall that that the FDI decided in 2013 to move the Day from September to March, the essential reason being to reduce the potential clash between World Oral Health Day and the Annual World Dental Congress, conventionally held in September. It is worth repeating the FDI Policy Statement that national dental associations “should develop activities and initiatives aimed at increasing awareness for oral health as well as the impact of oral diseases on general health, well being and economy”. Our Association continues to celebrate Oral Health Month in September, as recorded in the Health Calendar, 2016, issued by the Health Systems Trust. Intriguingly, the Calendar does not mention World Oral Health Day in March, which is otherwise recorded as Reproductive Awareness Health Month.. (and perhaps fittingly, there are two special weeks juxtaposed—the first being Pregnancy Awareness Week, 8 - 14 March, and Condom Week, 10 - 16 March. Seems there may be a case for conservation of energy there as well!)

The February issue prints a paper in the context of the 2015/2016 Association Theme: Oral Health and Psychological Well Being. The authors, from Sefako Makgatho Health Sciences University, have closely followed that theme in their paper: Oral health and subjective psychological well-being among South African Adults: The paper is compulsive reading and the conclusion is telling: “Good oral health is independently associated with greater subjective well-being. This highlights the need to prioritise oral health promotion as an integral part of promoting general health and improving the quality of life of South Africans.” An eloquent case for conservation of energy... whatever effort may be devoted to the promotion of oral health is energy well spent.

Now look at a linguistic conservation of energy ... the word “holophrasis” defined by the OED as “the expression of a combination of ideas by one word”. Absolutely apt for the forthcoming Congress of the Association... the programme represents a holophrasis of our profession. So many concepts, so many skills, so many stimulations... all summarised in that one word. A conservation of energy indeed... and our attendance at the Congress will reap rich rewards across all disciplines 19-21 March.

So we have solved the question, large birds walk, small birds hop, except vultures hop, don’t they? And wagtails walk, don’t they? How fortunate we are that there are always questions to be posed and answers to be sought. Dentistry is no exception.