

Topic & Key sentences + Paragraph shapes

The topic sentence:
the entrance to the paragraph



First sentence of a paragraph in a later part of a Discussion.

“Our findings have relevance for public health.

Our findings have relevance for public health. To the extent that clinical or policy manoeuvres increase the happiness of one person, they might have cascade effects on others, thereby enhancing the efficacy and cost effectiveness of the intervention. For example, illness is a potential source of unhappiness for patients and also for those individuals surrounding the patient. Providing better care for those who are sick might not only improve their happiness but also the happiness of numerous others, thereby further vindicating the benefits of medical care or health promotion.

First sentence of a paragraph in a Results section.

“Pulmonary nerve endings were relatively insensitive to phenal diguanide.

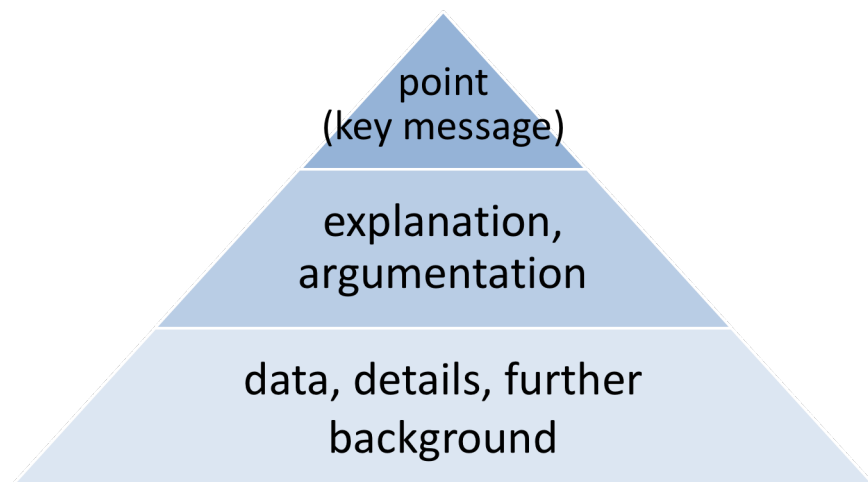
Pulmonary nerve endings were relatively insensitive to phenal diguanide. Of 25 pulmonary nerve endings tested, only 10 were stimulated when this drug was injected into the right atrium, and in only one of these did firing exceed 2.2 impulses/s. If the latter ending is excluded, the average peak frequency of the endings stimulated was only 1.7 impulses/s.

The first sentence: topic sentence

The first sentence of a paragraph:

- introduces the **topic** of the paragraph
- gives the reader an idea of the content of the paragraph (or: the **question** that the paragraph will answer)
- may also provide the **central idea** (the point or key sentence) -> pyramid

The pyramid



Our findings have relevance for public health. To the extent that clinical or policy manoeuvres increase the happiness of one person, they might have cascade effects on others, thereby enhancing the efficacy and cost effectiveness of the intervention. For example, illness is a potential source of unhappiness for patients and also for those individuals surrounding the patient. Providing better care for those who are sick might not only improve their happiness but also the happiness of numerous others, thereby further vindicating the benefits of medical care or health promotion.

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Topic sentence



First sentence of paragraph

Key sentence

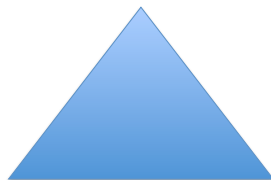


Sentence with **most important** message of paragraph

Key sentence is the topic sentence



paragraph is pyramid shaped



Pyramids

- Many paragraphs in the Results section
- First paragraph of Discussion
- Paragraphs that present arguments
- Paragraphs that explain limitations or strengths

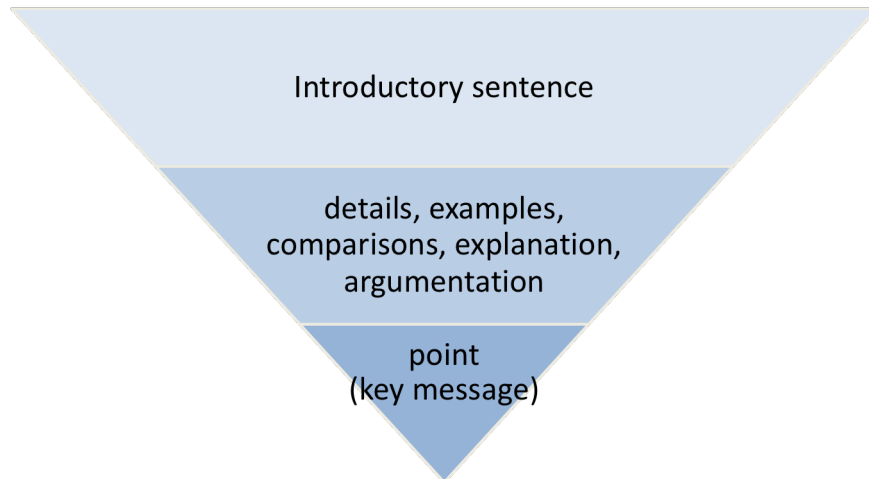
Key sentence is the last sentence of the paragraph



paragraph is funnel shaped



The funnel



First sentence of paper (opening sentence of introduction).

Happiness is a fundamental object of human existence, so much so that the World Health Organization is increasingly emphasising happiness as a component of health.

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Finally, similarity in socioeconomic status probably cannot explain the clustering of happy people. Next door neighbours have a much stronger influence than neighbours who live a few doors down in the same neighbourhood - and who consequently have similar housing, wealth, and environmental exposures. Moreover, the geographical distribution of happiness is not systematically related to local levels of either income or education (see maps in appendix on bmj.com). Both of these observations suggest that contextual effects are probably not driving our results.

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Funnel: when?

- First paragraph of Introduction (starting broad) – first paragraph of new topic
- When explanations, more details or arguments are needed before you can make your point

Book case

First sentence announces content

First element / step / feature / idea

Second element / step / feature / idea

Third element / step / feature / idea

There are three different theories put forward for the very slow relaxation of catch muscles of molluscs.

There are **three different theories** put forward for the very slow relaxation of catch muscles of molluscs. **One theory** holds that catch is due to some unusual property of myosin in these muscles that produces a small rate of detachment. In this theory, paramyosin would have no special role beyond that of providing the long scaffolding on which the myosin is positioned as well as the mechanical strength for the large tensions developed. **The second theory** holds that tension is developed by actin-myosin interaction but is maintained by paramyosin interactions. Because the thick filaments are of limited length, interaction would have to occur through fusion of thick filaments. **A third theory, to which I subscribe**, pictures a structural change in the paramyosin core affecting the rate of breaking of myosin-actin links at the filament structure.

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Our findings do not allow us to identify the actual causal mechanisms of the spread of happiness, but various mechanisms are possible. Happy people might share their good fortune (for example, by being pragmatically helpful or financially generous to others), or change their behaviour towards others (for example, by being nicer or less hostile), or merely exude an emotion that is genuinely contagious (albeit over a longer time frame than previous psychological work has indicated). Psychoneuroimmunological mechanisms are also conceivable, whereby being surrounded by happy individuals has beneficial biological effects.

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The hourglass

The spread of happiness seems to reach up to three degrees of separation, just like the spread of obesity and smoking behaviour. Hence, although the person to person effects of these outcomes tend to be quite strong, they decay well before reaching the whole network. In other words, the reach of a particular behaviour or mood cascade is not limitless. We conjecture that this phenomenon is generic. We might yet find that a “three degrees of influence rule” applies to depression, anxiety, loneliness, drinking, eating, exercise, and many other health related activities and emotional states, and that this rule restricts the effective spread of health phenomena to three degrees of separation away from the ego.

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The diamond

Our results are consistent with previous work on the evolutionary basis of human emotions and with work focusing on the fleeting direct spread of emotions. In addition to their internal and psychological relevance, emotions have a specifically social role: when humans experience emotions, they tend to show them. Like laughter and smiling, the emotion of happiness might serve the evolutionarily adaptive purpose of enhancing social bonds. Human laughter, for example, is believed to have evolved from the “play face” expression seen in other primates in relaxed social situations. Such facial expressions and positive emotions enhance social relations by producing analogous pleasurable feelings in others, by rewarding the efforts of others, and by encouraging ongoing social contact. Given the organisation of people (and early hominids) into social groups larger than pairs, such spread in emotions probably served evolutionarily adaptive purposes. There are thus good biological, psychological, and social reasons to suppose that social networks—both in terms of their large scale structure and in terms of the interpersonal ties of which they are composed—would be relevant to human happiness.

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