<https://www.thoughtco.com/duality-of-patterning-language-1690412>

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*Duality of patterning* is a characteristic of human [language](https://www.thoughtco.com/what-is-a-language-1691218) whereby [speech](https://www.thoughtco.com/speech-linguistics-1692121) can be analyzed on two levels:

1. As made up of meaningless elements; i.e., a limited inventory of sounds or [phonemes](https://www.thoughtco.com/phoneme-word-sounds-1691621)
2. As made up of meaningful elements; i.e., a virtually limitless inventory of [words](https://www.thoughtco.com/word-english-language-1692612) or [morphemes](https://www.thoughtco.com/what-is-a-morpheme-1691406) (also called *double articulation)*

"[D]uality of patterning," says David Ludden, "is what gives [language](https://www.thoughtco.com/what-is-the-english-language-1690652) such expressive power. Spoken languages are composed of a limited set of meaningless speech sounds that are combined according to [rules](https://www.thoughtco.com/rules-of-english-1691922) to form meaningful words" (*The Psychology of Language: An Integrated Approach*, 2016).

* "Human language is organized at two levels or layers simultaneously. This property is called *duality* (or 'double articulation'). In speech production, we have a physical level at which we can produce individual sounds, like *n*, *b* and *i*. As individual sounds, none of these discrete forms has any intrinsic [meaning](https://www.thoughtco.com/meaning-semantics-term-1691373). In a particular combination such as *bin*, we have another level producing a meaning that is different from the meaning of the combination in *nib*. So, at one level, we have distinct sounds, and, at another level, we have distinct meanings. This duality of levels is, in fact, one of the most economical features of human language because, with a limited set of discrete sounds, we are capable of producing a very large number of sound combinations (e.g. words) which are distinct in meaning." (George Yule, *The Study of Language*, 3rd ed. Cambridge University Press, 2006)

Animal Communication

* "The level of sounds and [syllables](https://www.thoughtco.com/syllable-definition-1692165) is the province of [phonology](https://www.thoughtco.com/phonology-definition-1691623), while that of meaningful elements is the province of [grammar](https://www.thoughtco.com/what-is-grammar-1690909) and [semantics](https://www.thoughtco.com/semantics-linguistics-1692080). Has this kind of duality any analog in animal [communication](https://www.thoughtco.com/what-is-communication-1689877) systems?... The short answer to [that] question seems to be no.
(Andrew Carstairs-McCarthy, *The Origins of Complex Language: An Inquiry Into the Evolutionary Beginnings of Sentences, Syllables, and Truth*. Oxford University Press, 1999)
* "It is hard to find clear and uncontroversial examples of duality of patterning outside our own species. But let us say that we can find them—and there is evidence, from the way some animals like birds and dolphins manipulate melodies, that this might be true. This would mean that duality of patterning is a necessary condition for a communication system to be a human language, but that by itself it may not be enough. There is no human language without duality of patterning."
(Daniel L. Everett, *Language: The Cultural Tool*. Random House, 2012)

The Structures of Phonology and Syntax

* "The question of whether the structures of phonology and [syntax](https://www.thoughtco.com/syntax-grammar-1692182) are separate and distinct is relevant to the notion of duality of patterning... The division between meaningful and meaningless elements is less sharp than it appears, and the fact that words are composed of phonemes is arguably just a special case of the pervasive hierarchical structure that is present in language...
"Of all Hockett's design features, duality of patterning is the most misrepresented and misunderstood; in particular, it is frequently conflated with or linked to [productivity](https://www.thoughtco.com/productivity-language-1691541) (Fitch 2010). Hockett seems to have regarded duality of patterning as the single most important breakthrough in the evolution of language (Hockett 1973: 414), yet he himself was unsure whether to ascribe duality of patterning to the dance of the honeybee (Hackett 1958: 574)."
(D.R. Ladd, "An Integrated View of Phonetics, Phonology, and Prosody." *Language, Music, and the Brain: A Mysterious Relationship*, ed. by Michael A. Arbib. MIT Press, 2013)