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A [Pawn](#) is **doubled** (or, sad to say, tripled) if there are more pawns of the same [color](#) on a given [file](#). Early programs and papers advocated evaluation it as half a pawn, today the penalty uses to be less severe.

It might be argued that, given a perfect pawn structure evaluation, a term such as doubled pawns would not be needed, since they usually introduce another [pawn structure](#) weaknesses: some kind of [backwardness](#), lack of a [candidate passer](#) that otherwise would be there etc. However, most [evaluation functions](#) do not go into such details as to justify removing this term.

Types of Doubled Pawns

[Hans Berliner](#) characterizes doubled pawns by their exchange potential against opponent pawns on adjacent files ^{[1][2]}:

The doubled pawns on the b-file are the best situation, the f-file pawns are next. The h-file pawns are the worst situation because

8/1p6/p3pp1p/8/8/1PP2P1P/1P3P
1P/8 w - -

two pawns are held back
by one opposing pawn,
so the second pawn has
little value.

Crippled Majority

A doubled pawn of a so called "crippled" [majority](#) devalue that majority. [Hans Berliner](#) on following position in *Some Innovations Introduced* by [Hitech](#) ^[3]:

8/1pp2ppp/1p6/8/8/5P2/PPP2PPP/
8 w - -

Our pawn-structure algorithm is quite simple, detecting only isolated and multiple Pawns, and the effect of multiple Pawns on viable pawn majorities. For instance, in Diagram 1 the value of White's doubled Pawn is negligible, while Black's is almost full-valued. This distinction, an innovation, was first introduced in [Patsoc](#) ^[4], and we were able to adapt the code to make up tables to be loaded into six identical hardware units computing pawn structure in parallel.

All About Doubled Pawns

The vast amount of detailed knowledge about doubled pawns, which rarely gets implemented, can be found in the article *All About Doubled Pawns* by [Larry Kaufman](#) ^[5].

See also

- [Double and Triple \(Bitboards\)](#)
- [Isolated Pawn](#)
- [Pawn Islands](#)
- [Pawn Majority](#)

Publications

- [Larry Kaufman](#) (2005). [All About Doubled Pawns](#). (first published in [Chess Life](#), May 2005, p.22)

Forum Posts

- [Doubled and Backward Pawn Engine "Definitions"](#) by [Brian Richardson](#), [CCC](#), September 07, 2009
- [passed but doubled pawns](#) by [Jon Dart](#), [CCC](#), June 15, 2015 » [Passed Pawn](#)
- [Doubled pawns](#) by [Stefano Gemma](#), [CCC](#), May 11, 2016

External Links

- [Doubled Pawn from Wikipedia](#)
- [All About Doubled Pawns](#) by IM [Larry Kaufman](#)
- [Doubled Pawns Strength and weakness](#) by [Georgi Orlov](#)
- [Ástor Piazzolla - Tristezas de un Doble A](#), [Montreux Jazz Festival](#), 1985 [YouTube](#) Videos

References

1. [^] [Hans Berliner](#) (1999). *The System: A World Champion's Approach to Chess*, [Gambit Publications](#), ISBN 1-901983-10-2
2. [^] [Types of doubled pawns from Wikipedia](#)
3. [^] [Hans Berliner](#) (1987). *Some Innovations Introduced by Hitech*. [ICCA Journal](#), Vol. 10, No. 3, pp. 111-117
4. [^] [Hans Berliner](#) (1985). *Computer Chess at Carnegie Mellon University*. [Advances in Computer Chess 4](#)
5. [^] [Larry Kaufman](#) (2005). [All About Doubled Pawns](#). (first published in [Chess Life](#), May 2005, p.22)

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