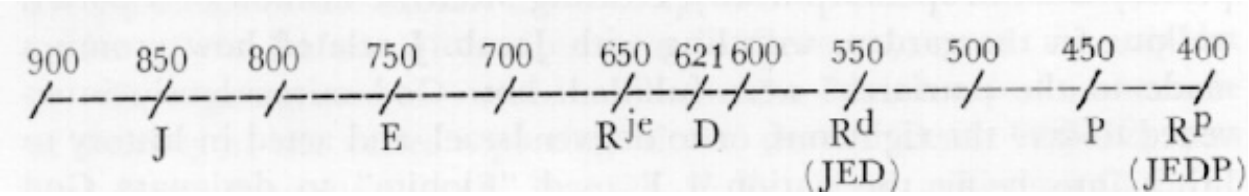
The Graf-Wellhausen analysis identified four major literary sources in the Pentateuch, each with its own characteristic style and vocabulary. These were labeled: J, E, D and P.

The J source used the name "Yahweh" ("Jahveh" in German) for God, called the mountain of God "Sinai," and the pre-Israelite inhabitants of Palestine "Canaanites," and was written in a vivid, concrete, colorful style. God is portrayed anthropomorphically, creating after the fashion of a potter, walking in the garden, wrestling with Jacob. J related how promises made to the patriarchs were fulfilled, how God miraculously intervened to save the righteous, or to deliver Israel, and acted in history to bring into being the nation.

E used "Elohim" to designate God until the name "Yahweh" was revealed in Exod. 3:15, used "Horeb" as the name of the holy mountain, "Amorite" for the pre-Hebrew inhabitants of the land, and was written in language generally considered to be less colorful and vivid than J's. E's material begins in Gen. 15 with Abraham, and displays a marked tendency to avoid the strong anthropomorphic descriptions of deity found in J. Wellhausen considered J to be earlier than E because it appeared to contain the more primitive elements.

The Deuteronomic source, D, is confined largely to the book of Deuteronomy in the Pentateuch, contains very little narrative, and is made up, for the most part, of Moses' farewell speeches to his people. A hortatory and emphatic effect is produced by the repetition of certain phrases: "be careful to do" (5:1, 6:3, 6:25, 8:1), "a mighty hand and an outstretched arm" (5:15, 7:19, 11:2), "that your days may be prolonged" (5:16, 6:2, 25:15). Graf had demonstrated that knowledge of both J and E were presupposed in D, and having accepted DeWette's date of 621 B.C. for D, argued that J and E must be earlier. J was dated about 850 B.C. and E about 750 B.C.

The Priestly tradition, P, reveals interest and concern in whatever pertains to worship. Not only does P employ a distinctive Hebrew vocabulary but, influenced by a desire to categorize and systematize material, develops a precise, and at times a somewhat labored or pedantic, style. Love of detail, use of repetition, listing of tribes and genealogical tables, does not prevent the P material from presenting a vivid and dramatic account of Aaron's action when an Israelite attempted to marry a Midianite woman (Num. 25:6-9) or from developing a rather euphonious and rhythmical statement of creation (Gen. 1). The Graf-Wellhausen hypothesis noted that P contained laws and attitudes not discernible in J, E, or D and reflected late development. P was dated around the time of Ezra, or about 450 B.C.

The combining of the various sources was believed to be the work of redactors. Rje, the editor who united J and E around 650 B.C. provided connecting links to harmonize the materials where essential. Rd added the Deuteronomic writings to the combined JE materials about 550 B.C., forming what might be termed a J-E-D document. P was added about 450-400 B.C. by Rp, completing the Torah. This hypothesis, by which the contradictions, doublets, style variations, and vocabulary differences in the Pentateuch were explained, can best be represented by a straight line.