

# Form-Function Dyads and Computational Rhetoric

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## Abstract

What if I stepped upon the stage and offered you a line of small linguistic units, compact dyads of form and function. “Compact *linguistic* dyads,” I tell you, “in which the form in a very real sense *is* the function? Buy the forms. Get the functions for free!” Would you cry “Snake oil!” and turn back to your familiar work, or would you lean back in your chair, tap your pencil, and wonder about the price?

The bane of computational argument analysis—indeed, of almost any computational analysis of language that cares about meaning and function—is the so-called autonomy of form, a presumed arbitrariness of linguistic structure, precipitating out of the long history of structuralism, from Saussure through generative grammar, and which still infuses such developments as cognitive linguistics and construction grammar. There is form and there is meaning, the thesis states, and the only way to link them is through some abstruse and elaborate system of rules, poorly understood. Computers are good at finding form: figure out the pattern, build the algorithm, turn your machinery loose on a text or a corpus, and it dutifully returns with every scrap and snippet that satisfies the pattern. Then what? Under the autonomy thesis, then you to start pretty much from scratch to figure out what they mean, what they are *doing* in the text, with a meagre set of abstruse rules. Under a form-function dyad model, the baseline is better. Your algorithms do not come back with arbitrary patterns; they come back with an understanding of those scraps and snippets.

This is not snake oil. It is not a magic bullet either, and it comes with a cost. Language is too dense and culture bound to succumb to simple cure-alls, and every model requires investment. But there *are* such dyads, predating structuralism by millennia. Studied by grammarians, rhetoricians, literary scholars since antiquity, but assigned to the dustbin of ‘mere decoration’ by modern linguistics, well before the advent of computers and cognitive science, they are known *rhetorical figures*: brief linguistic patterns manifesting unique iconicities that convey basic rhetorical or argumentative functions and that constrain meaning in significant ways. “All for one and one for all,” for instance, is not an arbitrary pair of structures of the form, [N [P [N]<sub>NP</sub>]<sub>PP</sub>]<sub>NP</sub>. It is an antimetabole, a reverse-repetition figure manifesting iconicities of symmetry, balance, and equivalence that convey a reciprocal and mutually reinforcing relationship between the individual and the group.

So, step right up, venture your capital, and take home some rhetorical figures. They are an untapped and immensely promising resource for argument mining; heck, to every computational approach to language that cares about meaning and function.