The rise of automated media buying and selling and greater attention to data analytics of all sorts continue to be relatively removed from the human-centered process of actually making the creative. Sure, there is a lot of talk about creatives better understanding the data and what it reveals about audience, adjusting messaging accordingly, etc. And of course there is always the dynamic ad creation wing. But when it comes to actually applying algorithms to the core choices in the messaging itself, that part of the process has stayed well outside the reach of the new machines.

But you knew that couldn’t last long. "We found that the ability to say something in 110 characters
can be math-defined,” says Assaf Baciu, SVP of operations, Persado. “With machine learning you can find the best way to make the content of the message for that user.”

The company takes a simple 100 to 300 character call-to-action from marketers and runs it through its algorithms and the database where Baciu says the company has hundreds of thousands of ways to say simple CTAs like “click here” or “for more info.” It is a combination of natural language processing, machine learning and algorithms working on the message. The algorithms analyze five variables for each message: emotion, features, call to action, style and structure. Different ways of filling these variables can be aimed at different types of emotions. The system can generate up to 16 million different versions of the message.

Then the system takes aim at the specific KPI the company is trying to drive, generating 16 to 32 different ways of expressing the message that convey both positive and negative emotions and different features. “For each element in the ad we have tagged parts of speech and suggested things to put into the variables,” Baciu says. “We can show recommended options for the elements, always semantically distant from one another and with positive and negative emotions.”

The testing platform then gets responses from users that informs the algorithms that can be used to predict the success of different messages according to different KPIs. Part of what makes all of this work is having an online direct-response channel that allows for quick feedback. It works like a “mathematically driven focus group that helps understand what drives people to buy,” he says. The idea is that this sort of analysis of messaging and effectiveness not only can help optimize ad campaigns but inform overall strategies.

For a U.S. mobile operator, for instance, the company was targeting upgrades to smartphones. The medium was email. It used its so-called Marketing Language Engineering to generate more than 262,000 message variations in order to run tests. The end result was subject line phrasing like “put the world at your fingertips with the smart phone” and “stay connected in a whole new way.” The messages seem as if they could be generated by any marketing creative, but the company says its machine-generated solution resulted in a 200% increase in click-throughs on this email and a 115% increase in smartphone upgrades.

Baciu says that the system can also help delineate the emotional appeals to different groups for multiple kinds of target messaging. For instance, in working with a dating site, the aim was to upsell members a product that put the user photo on top of listings. “We found the best message for the group as a whole but then found different responses coming from women and men,” he says. “Women are reacting to a concept called flattery. You put your picture on top and meet someone like you. It uses a part of speech that flatters. But for men that lowered responses. Men wanted immediacy, to meet someone this week, [a factor] that was negative for women.”

Baciu emphasizes that this is not a real-time system, in that it takes considerable energy and time to generate many variables and run the tests. The company gets the best combination that works in the moment, observes it, and then iterates in the next wave of messaging.

This is the next area that technology will inform, the company is betting. “A lot of companies have invested in targeting but haven’t invested in what they say about products,” Baciu argues. “We have the technology, algorithms and direct-response channels to do better than guessing.”