Defamiliarization: Flarf, Conceptual Writing, and Using Flawed Software

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Abstract
One form of creativity uses defamiliarization, a mechanism that frees the brain from its rational shackles and permits the abducting brain to run free. Revision is still required, though.

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Design

Ark!!!
Shem raised the rope and forced his bulky frame through chapped his knees when they allowed a braying ass through the holy gates but it's holy shit fire downtown his oiled black hair glistened in the sun as the ass was led around the path toward the pinnacle of the secret of the hiding place of the Holy Ark

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Atlanta, Georgia, USA.
Noah bitched and moaned about the count
so Yaphet used the pinnacle of a technical
split legged capture bomb (holy fuck)
this kicked all kinds of ass

Ham completely destroyed his bitch ass

A poem like this is easy to dislike.

But it’s flarf [1] and I wrote it in 2003 using Google
to search for documents mentioning terms not
likely to appear together—here probably “ark,” “pin-
nacle,” “ass,” and “holy”—and then working with
some of the returned synopses pasted together as
a first draft. The point of working this way isn’t to
be cute but to assist the mind in finding unfamil-
 iar situations, novel language, unexpected com-
binations, and therefore new territory to explore
and thereby to make new discoveries possible, fi-
nally leading (perhaps) to fresh understanding.

I call this defamiliarization; it’s not a new tech-
nique—in the past we noticed defamiliarization having
taken place somewhere along the path of creation
by having a belief that the artist has a strong streak
of creativity and by admiration of the unusual mind
operating behind the scenes. Many artists—particu-
larly experimental artists—use a process of creat-
ing the first “draft” of the piece and then using the
piece itself as a partner in the creative process. Here
is how the fiction writer Robert Boswell put it:

I have grown to understand narrative as
a form of contemplation, a complex and
seemingly incongruous way of thinking. I
come to know my stories by writing my way

into them. I focus on the characters with-
out trying to attach significance to their
actions. I do not look for symbols. For as
long as I can, I remain purposefully blind to
the machinery of the story and only par-
tially cognizant of the world my story cre-
ates. I work from a kind of half-knowledge.

In the drafts that follow, I listen to what has
made it to the page. Invariably, things have
arrived that I did not invite, and they are
often the most interesting things in the story.
By refusing to fully know the world, I hope to
discover unusual formations in the landscape,
and strange desires in the characters. By
deciding to analyze the story, I hope to keep
it open to surprise. Each new draft revises
the world but does not explain or define it.
I work through many drafts, progressively
abandoning the familiar. What I can see is
always dwarfed by what I cannot know. What
the characters come to understand never
surpasses that which they cannot grasp. The
world remains half-known.

There can be no discovery in a world
where everything is known. A cru-

циal part of the writing endeavor is to
practice remaining in the dark. [2]

When we think formally about creative acts, the
question arises: Where does new stuff come from?
The philosopher Charles Sanders Peirce recognized
that traditional logical induction and deduction
were closed wrt prior assumptions and data: they
cannot produce new ideas. He proposed abduc-
tion to explain the form of reasoning that leads to new ideas. Informally, such an inference leads from an observation of a situation that is not yet understood to a hypothesis that, if true, explains the observed phenomenon. Peirce wrote:

Now, that the matter of no new truth can come from induction or from deduction, we have seen. It can only come from abduction; and abduction is, after all, nothing but guessing. We are therefore bound to hope that, although the possible explanations of our facts may be strictly innumerable, yet our mind will be able, in some finite number of guesses, to guess the sole true explanation of them. That we are bound to assume, independently of any evidence that it is true. Animated by that hope, we are to proceed to the construction of a hypothesis. [3]

How are defamiliarization and abduction connected? Consider this experiment: Look at the grammar at the bottom of the column. A test subject is shown 45 strings of length between 6 and 9 generated by it, and asked to copy down each one. The original list and copies are removed, and a short time later, the subject is asked to look at 60 strings made up of the letters X, V, M, R, & T, 30 of which were generated by the grammar below and 30 by a different one; next, the subject is told that the copied strings had something in common, and is asked to classify these 60 strings, each according to whether it has that same thing in common.

The classification task is a mystery, and coming up with a grammar that corresponds to the original 45 strings requires guessing—abduction. But, any performed abduction takes place implicitly in the subject’s mind. This test measures implicit learning—or implicit abduction: what grammar can give rise to the 45 test strings?

Now suppose a group of 40 people, broken into two 20-person groups, is asked to do the above experiment, but before that, the members of each group are asked to read an illustrated short story. One group reads a revision of Kafka’s “The Country Doctor,” which is a (slightly) absurdist story [4]. The other group reads a straightforward version of the same story [4]. What would happen?

Camus wrote about Kafka:

In this fundamental ambiguity lies Kafka’s secret. These perpetual oscillations between the natural and the extraordinary, the individual and the universal, the tragic and the everyday, the absurd and the logical, are found throughout his work and give it both its resonance and its meaning. [5]
Travis Proulx and Steven J. Heine did this experiment, and found that the group that read the absurd version of the story were 26% more accurate (correctly identified strings from the grammar) than the other, and classified 33% more strings as belonging to the grammar (ignoring whether they were right or wrong) [6]. Proulx and Heine claim this latter result is because of increased motivation, but perhaps it’s just increased energy.

The straightforward version of the story is linear and boring. It doesn’t require any guesswork to get its “meaning,” which in this case is nothing more than its (dull) plot and happy ending. The absurd version is not particularly crazy or surreal, but it does call for lots of abduction to try to make sense of it. Like many surreal and absurdist stories, no abductions work well, and the reader is left with a sense of mystery and strangeness. But the brain is hard at work abducting and becoming defamiliarized. No wonder, then, that with the mind open to far-flung connections it is able to learn a little more effectively and confidently.

Defamiliarization seems a way to get the brain abducting and hence exploring and discovering. Given this, we can argue that tools for helping creativity need not be second-class participants but essential partners to making the new really and radically new.

Creative work can be experimental, like Robert Boswell’s half-known world.

Artists who have produced experimental innovations have been motivated by aesthetic criteria: they have aimed at presenting visual perceptions. Their goals are imprecise, so their procedure is tentative and incremental. The imprecision of their goals means that these artists rarely feel they have succeeded, and their careers are consequently often dominated by the pursuit of a single objective. [7]

But not all creators work exclusively in the realm of “stuff”; not all writers write without a plan, without a concept; not all scientists work exclusively from data to hypothesis. Lots of creative work is not the product of unbounded exploration and discovery; lots of work is based on concepts.

In contrast, artists who have made conceptual innovations have been motivated by the desire to communicate specific ideas or emotions. Their goals for a particular work can usually be stated precisely, before its production, either as a desired image or a desired process for the work’s execution. Conceptual artists consequently make detailed preparatory sketches of plans for their paintings. [7]

At the top of the left column on the next page is a poem I wrote by using Babelfish as a defamiliarization aid. A Robert Frost poem was run through a number of cycles of translation to and through other languages then back to English to undo the idioms and figures of speech that Frost used originally, producing a set of raw language with which to start to construct a poem—a poem both weirdly similar to the original and dementedly different.

Just glance at it for a minute.
Frost’s original [8] is at the top of the right column.

My concept was to use Babelfish to make a set of ridiculous translations of the well-known poem in order to free it of its now-familiar wording. I had it translate the poem from English to Greek, then to Korean, then to Japanese, then to German, and back to English; I used a set of such cyclic translations as the starting point for the poem. This is conceptual art.

For experimental artists (e.g., painters):

... planning a painting is unimportant. The subject selected might be simply a convenient object of study, and frequently the artist returns to work on a motif he has used in the past. Some experimental painters begin without a specific subject in mind, preferring instead to let the subject emerge as they work. Experimental painters rarely make elaborate preparatory sketches. Their most important decisions are made during the working stage. The artist typically alternates between applying paint and examining the emerging image;
at each point, how he develops the image depends on his reaction to what he sees. [7]

For conceptual artists (e.g., painters):

...planning is the most important stage. Before he begins working, the conceptual artist wants to have a clear vision either of the completed work or of the process that will produce it. Conceptual artists consequently often make detailed preparatory sketches or other plans for a painting. With the difficult decisions already made in the planning stage, working and stopping are straightforward. The artist executes the plan and stops when he has completed it.

...extreme practitioners...make all the decisions for a work before beginning it. It is unclear, however, if this is literally possible. There are artists who came close to it, and perhaps achieved it, during the 1960s, by making plans for their work and having these plans executed by others. [7]

Both of the examples I’ve shown were produced using human effort after or intertwined with machine assistance, and in both cases the success of the result depended on the machine tools being flawed—or simply not very good. Had Google returned synopses of only rational documents mentioning my irrational search terms, I would have no starting point at all; and had Babelfish been a perfect translation engine, the starting point would simply be the original Frost poem. But luckily Babelfish made many trips from English and eventually back again like this trip to Japanese and back:

The only other sound is the sweep
Of easy wind and downy flake.

What I mean by flawed tools being good for creativity can be seen at the top of the next page. This poem was created by taking one of the stanzas from “The Love Song of J. Alfred Prufrock,” by T. S. Eliot, and running it through a sorting algorithm that uses a comparison predicate (<) that lies about 4% of the time. The result is the first draft of the poem. The sorting is based on the position of the words in the text and not what the words are. Guy Steele also used the idea in some poetry he was writing, and he and I each (individually) discovered the optimality of 4%–7% as the best “degree of lying”: larger than this and the result is gibberish, smaller and the result is too similar to the original to trigger new and interesting connections. One way to express this is that were the sorting perfect, the tool would have been useless, but being off by just a little is just enough defamiliarization to, perhaps, optimize creativity.

I have tried to use Google Translate to make poems the way the Frost derivative was made, but Google Translate generally translates too accurately.

More interestingly, using Google to create flarf has similarly become much harder recently. My speculation is that Google’s search algorithms have gotten better at trying to locate reasonable documents that satisfy apparently nonsensical search criteria—criteria that used to effectively locate crazy documents. I emailed Peter Norvig about this (Peter is Google’s Director of Research). He wrote back:
In the “good old days,” Google was closer to a traditional information retrieval system: if you gave a query that was four unusual words, it would retrieve only documents that included all four words. Now, we are more aggressive at allowing synonyms and related terms; as you say, we assume the query is sensible and try to make sense of it, rather than doing a literal match to keywords. That is better for most users, but unfortunately not for poets like you. [9]

Some scholars have argued that the ability to reason (properly) and irrationality are both products of evolution, but that irrationality is an unfortunate attendant bad side-effect of the evolutionary mechanisms. A bug. What if, though, irrationality were our secret doorway to really good abduction, our built-in mechanism to become defamiliarized when the situation requires radical creativity, such as when a unique danger presents itself; maybe evolution discovered that crazy / go nuts has survival value—maybe irrationality is bound to rationality like yin to yang, like resins to hardeners, like Penn to Teller.

Love Song of Lisp

and would it have been tea
been worth it after all
after the cups the marmalade
among the porcelain
talk among some of you and me and the dead
would it have been worthwhile
to have bitten off the matter with a smile
to have squeezed the universe into a come ball
to roll it toward some overwhelming question
say to me I am Lazarus come from the back
to tell you not all I shall tell you all
if one setting a pillow by her head should say
that is not what I meant at all
that it would be all and it would have been worth it after it
after all it would have been worthwhile after the sunsets
and the streets and the dooryards and sprinkled after the novels
the skirts that trail along more of the floor
and this so much is impossible to say just what I mean
but as if I threw a magic lantern
it would be the nerves on not a screen setting
it would have been worthwhile if one pillow
thrown off or throwing a shawl
would turn toward the window and should say
that this is all and that is not what I meant at all

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