

# Logic is part of design

[R. Casati](#), [G. Puccetti](#)

22 Novembre 2014

*Mangrovia is the place where [Roberto](#) Casati and [Goffredo](#) Puccetti talk about design. This conversation has started in December 2013. We are interested in the intellectual intricacy of design. We keep our eyes open on good and bad design - equally important for us. Equally important are theory (mostly from cognitive science) and practice (mostly from communication and process design).*



*Mangrovia è dal dicembre 2013 la bacheca appunti di Roberto Casati e Goffredo Puccetti sul design. Il design ci interessa per la sua complessità intellettuale. Cerchiamo intorno a noi esempi di buono e cattivo design e ne parliamo prendendo spunto dalla teoria (soprattutto dalle scienze cognitive) e dalla pratica (soprattutto dalla comunicazione e dai processi di progettazione).*

---

There are many constraints on the quality of information. Respect of hard mathematical facts, and of logic, is one of them.

Logic is about value. Not respecting logic is not respecting your reader. Toying with logic is toying with your audience. Sometimes you can try rhetorical tricks, violate logic for the sake of attracting attention. But these can only be isolated exceptions, distractions.

Sometimes you just make mistakes – and create some confusion. The Donors at the San Francisco Legion of Honor are divided in categories, according to the amount of their donation. But then, these categories cannot overlap.

CHAIRMAN  
UXILIARY OF THE FINE ARTS MUSEUM  
S • GOODBYES • HILLSBOROUGH  
TIONS • THE JEC FOUNDATION •  
KILIARY OF THE FINE ARTS MUSEUM  
OR JEWISH LIFE AND CULTURE

\$2,500 - \$4,999

TCHEN LLP • CITY NATIONAL  
C. • HARBINSON TUNE KASSEI  
HE WALTER S. JOHNSON FOUN  
ON • TEMPOSITIONS • TERRA

\$1,000 - \$2,999

LEWELLYN CATERING & EVE  
RT INTERNATIONAL • GLOBA  
Y • JANE HAMMOND EVENT  
B • PARKER & CROSLAND

Donor's hall of fame, San Francisco Legion of Honor. Image credit: Roberto Casati, May 2014.

Where did your name end up? If you donated \$2,800, were you *promoted* to the **\$2,500-\$4,999** category, or *demoted* to the **\$1,000-\$2,999** category? Are you very good, or just about good. And how can the reader know? Nice, solid capital letters. Great visual impact. Everything in this image bespeaks power, generosity, and reassuringly so. But the overlap of categories spreads the doubt, and dramatically lowers the epistemic value of your information.

But this, as we said, is likely to be a mistake. What if you deliberately toy with logic, and with the logical expectations of your audience? French law requires labeling of the country of origin of food on sale. Here is how a retailer managed it:

Where do Chérie potatoes come from? A global answer to the problem. Image credit: Roberto Casati, Villiers-en-Bière, August 2014.

Read it carefully: “Origin: France, **or** imported”. The point is, no one is lying here: the label could not be more true. Potatoes: they do come from France, or elsewhere. “Elsewhere” means “not France”. “P or not P” is a tautology, a sentence that is true in all possible worlds. In no situation potatoes will not come from France, or not France; they are bound to come from somewhere (maybe from Mars, or from Sirius: the sentence will be true nevertheless).

Logic is about value. Tautologies, in this communicational context, are too cheap. That they have been used indicates laziness, or worse.

1407\_logic\_disjunction\_dsc00735\_small.jpg

---

Se continuiamo a tenere vivo questo spazio è grazie a te. Anche un solo euro per noi significa molto. Torna presto a leggerci e [SOSTIENI DOPPIOZERO](#)