Inconsistent notation

Some of you think that math is written in such a way that it is unambiguous. I feel an urge to prove you wrong.

I don't include the ambiguity of specific symbols for variables / constants, like the symbol i as an imaginary unit versus the symbol i as a variable (typically used in sums), because we cannot avoid them when using our finite alphabet.

- $9 : 3\,(2 + 1)$
  Is it equal to 1?
  Is it equal to 9?

- $a\,(b + c)$
  either function a applied to the sum of values b and c
  or product $a \cdot (b + c)$

- T^n
  either $T^{1\times n}$
  or $T^{n\times 1}$

- a_1^2
  either $a_1 \cdot a_1$
  or $a_{1,2}$

- a_{ij}
  either $a_{i,j}$
  or a_k where $k = i \cdot j$

- $\rho, \hat{\rho}$
  either two different functions, each of them to be defined separately
  or $\hat{\rho}$ is some kind of modification of ρ that does not have to be defined explicitly, thus the "hat" itself is a higher order function

- $v, \bar{v}$
  either symbol v and its value assigned by some labeling
  (e.g. a propositional variable and its value in a chosen model)
  or a propositional variable (or a boolean vector) v and its negation
  or two independent variables
  or a function and its upper bound

- $\left(\sum_{i=1}^{3} a_i + b\right)$
  either $a_1 + a_2 + a_3 + b$
  or $a_1 + b + a_2 + b + a_3 + b$

- $f^2(x)$
  either $(f(x))^2$
  or $f(f(x))$
  or $\frac{f(x_1)+f(x_2)}{2}$

- $f[g, h]$
  either an element of matrix F in the g-th row, h-th column: $f_{g,h}$
  or a superposition of functions g, h (unary) and f (binary): $\lambda x.\ f(g(x), h(x))$