Critical Design Strategy (CDS) Name design					st impression rcle 5 words)		clear clever complex useless useful	confusing reliable organised average fair	sensible pointless moderate bad vague	indifferent indistinctive spectacular fulfilling beautiful	
		-2	-1	0	1	2					
User	 1 Is suitable for the user and task 2 Is understandable for user and task to hand 3 It doesn't require guesswork 4 Is trustworthy 5 Would be useful 	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	Incompi Require Distrust	ble>Suitabl rehensible s guessworl ful>Trustful s>Useful	·Understand k···•Clear as		
Environment	 6 It would fit in with other technologies 7 Uses suitable technology 8 Has appropriate interaction 9 Its sizing is correct 10 Gives a positive ambience 	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	Unsuita Unsuita Unsuita	setting+Rigible technoloble interactional ble size	gy⊶Right t on⊶Approp uitable phys	riate interaction ical size	
Interface	 11 Suitable user interface 12 Ergonomic interface 13 Facets are sized suitably 14 Interface suitably spaced 15 Suitable quantity of interface parts 	0 0 0 0 0	0 0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	Uncomf Poorly p Poor fac	ble GUI Su ortable Ergoroportioned cet spacing ble facet qua	gonomic ···+Suitable s ••Relevant s		ty
Components	 16 Has all necessary components 17 Has all suitable output/view types 18 Clear relationships between parts 19 Task can be easily performed 20 Suitable organisation of components 	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	Unsuital Unclear Task un	ole types⊶S corresponde fulfilled⊶Tas	Suitable viev ences⊶Cle sk easily pe	ar view relations	hip
Design	 21 Inspiring design 22 Aesthetic and visually attractive 23 Good composition and space utilisation 24 Suitable coverage of data/underpinning facets/concepts 25 Clear instructions, labels, legends to give context 	0 0 0 0	0 0 0 0 0	0 0 0 0	0 0 0 0 0	0 0 0 0	Unattrac Poor lay Unsuital	ring•Inspirir ctive•Visua rout•Good ble coverage bels/legends	lly attractive compositior e → Suitable	1	
Visual Marks	26 Right choice of channels to communicate things clearly 27 Communicates appropriate relationships/morphisms 28 The types of marks used, communicate things well 29 Components are shown at the right level of abstraction/detail 30 Nothing is hidden that shouldn't be hidden Sum values	0	0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0	Inapprop Inapprop Poor sca	oriate mappi	ngs⊶Appro types⊶Suita Good scale/a		
R	eflection: first impression, individual categories	Tot	al								
Improvements:											
											-
,	Average	-10 	-5 -0.16	0	5 0.16	-	1 1	-	85 40 4. 16 1.33 1.		

Supplemental material. Long version of CDS, submitted to IEEE VIS 2025, TVCG. "Critical Design Strategy: a Method for Heuristically Evaluating Visualisation Designs". Jonathan C. Roberts, Hanan Alnjar, Aron E. Owen and Panagiotis D. Ritsos