



How Socio-Economics Has Impacted Car Design

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INTRODUCTION

I will be researching the car's aerodynamics (i.e., body lines, curvature, drag, wheelbase), sentiment (strong, rugged, utility, innovational), and how they have changed over time due to socioeconomics. I aim to find a correlation between socioeconomic periods (wars, recessions, social issues) throughout history and how that affected this areas of study.

RESEARCH METHODOLOGIES

The research will be pure research, seeing how I am not conducting any experiments or creating new theories, only improving upon existing research.

My data will consist of quantitative data such as drag coefficient, car measurements and fuel economy, and qualitative data such as the cars' sentiment (strong, artisanal, innovative, utility). My methodology is observational because I will not be conducting an experiment, solely making observations. The general population I wish to study will be the most popular automobile during the socioeconomic era I research (Obama Era, Iran War, Watergate Crisis, Great Depression, etc.) and how it changes.

DATA AND FINDINGS

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	Top Selling	Height	Length	Width	Wheel Base	Body Lines	Accessories	Drag	Fuel Economy	Emotion (1-4)	Reason						
2	30s	1.75m	4.21m	1.7m	2.7m	straight, slight nose	none	0.4	19mpg	1	Rugged, 2 Sa Chrome accents, classic look, luxury						
3	30s	1.42m	3.66m	1.7m	2.7m	straight, slight nose	none	0.19	13mpg	1	Rugged, 2 Sa Chrome accents, classic look, luxury						
4	40s	1.86m	4.95m	1.9m	2.9m	Flared fenders, none	none	0.4	13mpg	2	Rugged, 2 Sa Large, boxy, used for camping						
5	50s	1.5m	5.10m	1.88m	2.9m	straight body, c none	none	0.38	17mpg	1	Rugged, 2 Sa Chrome accents, classic look, luxury						
6	60s	1.39m	5.41m	2.02m	3.02m	straight body, i none	none	0.37	14mpg	1	Rugged, 3 Sa V8 engine, muscle car design						
7	70s	1.36m	5.32m	1.89m	2.84m	curved roof, sit hood scoops	sporn	0.35	18mpg	1	Rugged, 2 Sa Aggressive, angular design, sporty						
8	80s	1.38m	4.61m	1.7m	2.6m	Very straight, h Dip up headlight	none	0.3	24mpg	3	Utility, 4 Imp Fuel-efficient, reliable, high-tech for the time						
9	90s	1.41m	5.02m	1.85m	2.76m	Angular, slight nose	none	0.3	21mpg	2	Strong, 4 Imp Spacious, practical, family car						
10	2000s	1.47m	4.41m	1.72m	2.7m	Curved hood, "none	none	0.26	46mpg	4	Utility, 4 Imp Hybrid technology, eco-friendly, unique shape						
11	2010s	1.47m	4.81m	1.82m	2.78m	Curved than air none	none	0.28	26mpg	4	Utility, 2 Art Reliable, practical, family car						
12																	
13	Best Acclaimed	Height	Length	Width	Wheel Base	Body	Accessories	Drag	Horsepower	Emotion (1-4)	Reason						
14	20s	1.42m	4.4m	1.73m	2.95m	Body shape, sit none	none	0.7	240	Powerful 1, Art Distinctive curves, handcrafted interiors, refined details							
15	30s	1.2m	4.71m	1.72m	2.98m	Streamlined, air none	none	0.35	200	Powerful 4, Art Streamlined design, high-end finishes, exquisite craftsmanship							
16	40s	1.29m	4.71m	1.6m	2.99m	Sleek, aerodynamic	none	0.43	160	Artisan 2, Regi Sleek lines, classic accents, elegant interior							
17	50s	1.3m	4.49m	1.9m	2.4m	Aerodynamic c/Iconic	Cultriv	0.27	215	Powerful 1, Art Iconic styling, aerodynamic shape, luxurious interior							
18	60s	1.65m	4.38m	1.78m	2.55m	Iconic "wedge" Front and rear	none	0.38	350	Powerful 2, Re Aggressive styling, pop-up headlights, Italian craftsmanship							
19	70s	1.97m	4.14m	1.99m	2.45m	"Wedge" shape Pop-up headlight	none	0.43	375	Powerful 4, Art Sleek wedge-shaped design, science doors, futuristic look							
20	80s	1.12m	4.41m	1.98m	2.45m	Aggressive "W" Large rear wing	none	0.34	473	Powerful 4, Art Bold aerodynamic lines, iconic rear wing, racing-inspired style							
21	90s	1.14m	4.29m	1.82m	2.72m	Streamline shape Distinctive Dh	none	0.32	618	Powerful 4, Art Sleek aerodynamic design, unique 3-seat configuration							
22	2000s	1.20m	4.46m	2.00m	2.71m	Futuristic shape C-shaped front	none	0.36	987	Powerful 4, Art Futuristic curves, iconic horseshoe grille, top-of-the-line tech							
23	2010s	1.19m	4.59m	1.95m	2.67m	Sharp lines, flat Large air intake	none	0.34	903	Powerful 4, Art Sleaking design, advanced hybrid technology, bespoke interior							

Legend

Powerful/Strong: Performance-focused (1-4)

Rugged: Durable (1-2), function over form (1-2)

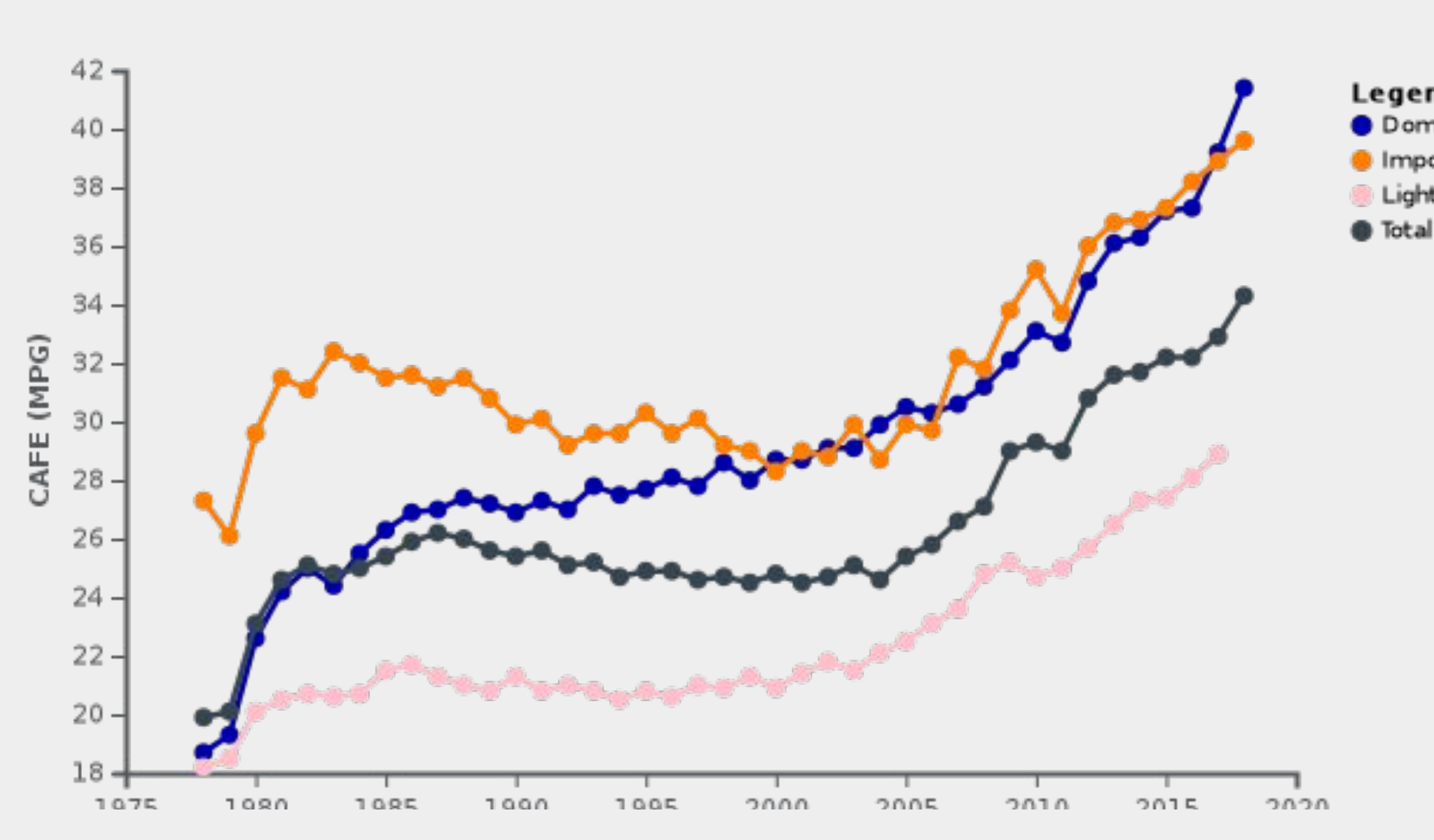
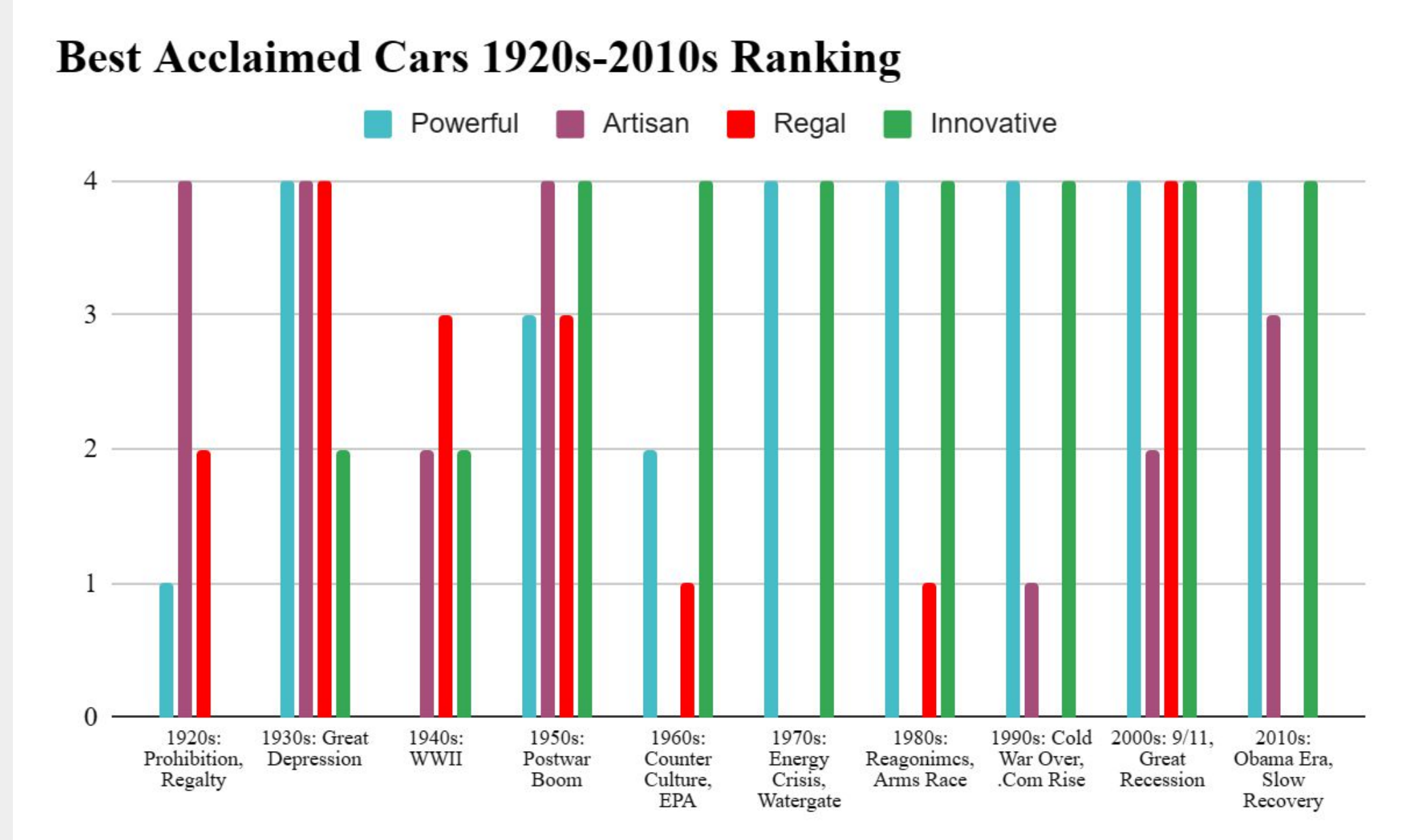
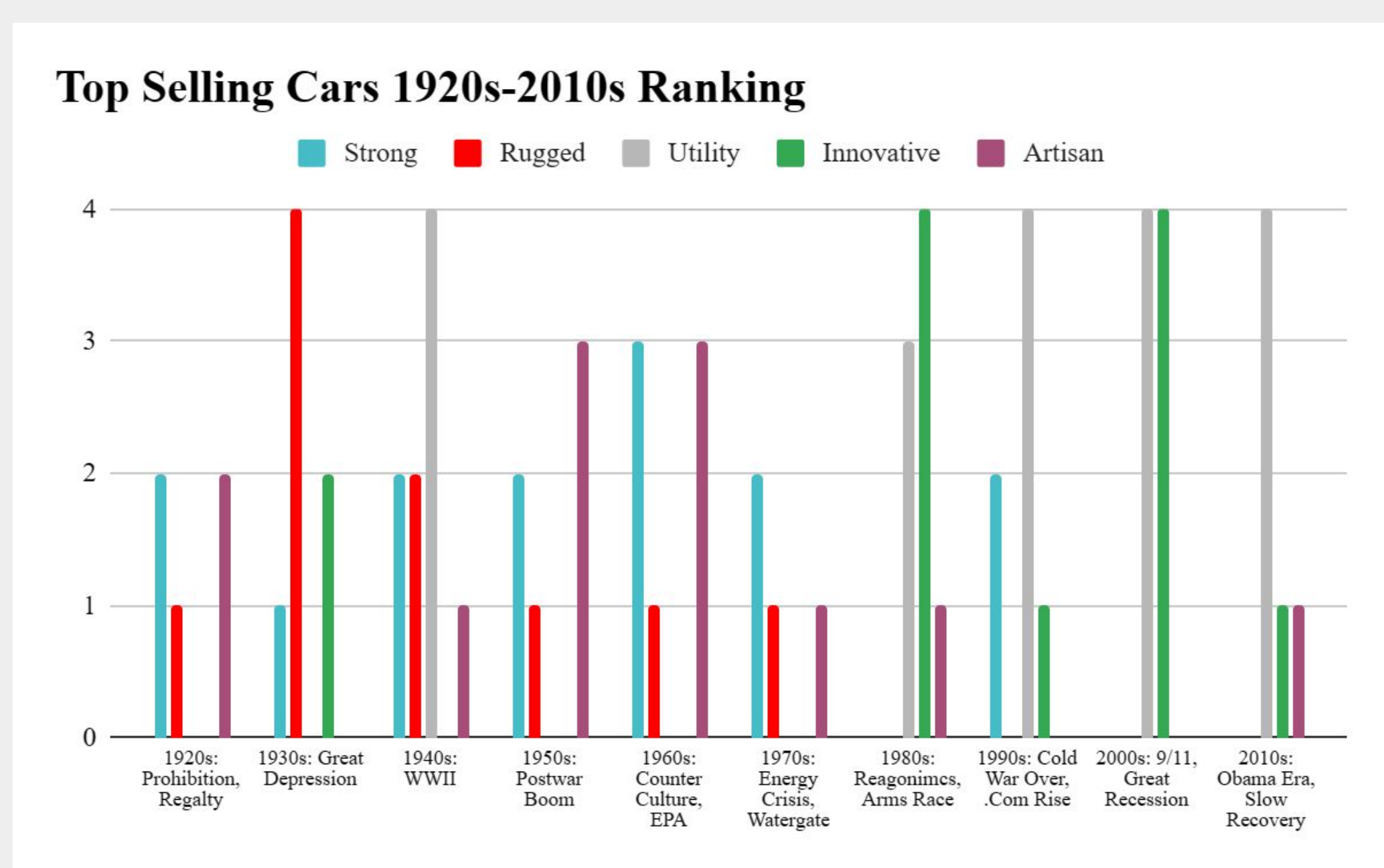
Artisan: Streamlined (1-2), curvature-focused style (1), accessories (1)

Innovative: New tech for the decade (1-4)

Utility: Basic (1), efficient transportation (2), cost efficient (1)

Regal: Status-focused (1-2), limited availability (1-2)

DISCUSSION, ANALYSIS, AND EVALUATION



CAFE: US created CAFE in 1975 to improve fuel economy in cars and light trucks by penalizing automakers for producing inefficient vehicles. (Fuel Economy ← → Design)

CONCLUSIONS, IMPLICATIONS, AND NEXT STEPS

Comparing the two data sets shows how the automotive industry targeted different demographics based on socioeconomic trends. In the 1960s, during the counterculture movement and focus on the EPA, mainstream cars shifted towards artisanal ranking, while the best-acclaimed cars focused on innovation. The shift in artisanal quality reflected the younger generation's involvement in protests against the war and government. High-end cars of the decade reflected class division during times of economic downturn. During the Great Recession and 9/11 Terrorist Attack in the 2000s, mainstream automobiles solely focused on ruggedness. In contrast, the Bugatti Veyron became the best-acclaimed car and symbolized regality and future prosperity for high-class individuals. This same trend appears in during the Great Depression of the 1930s when the common autos only focused on ruggedness and survival. Compared to the Ford Roadster, the Bugatti Type 57SC Atlantic still emits the same level of sovereignty today as it did when it was first built.

This furthers the argument that, despite any economic event, high-end autos focus more on the consumer than the economic landscape they're living in. Using these trends from our socioeconomic, car manufacturers can analyze the current landscape and how new lines of cars can be designed optimally. Socioeconomics isn't the only driving force affecting car design, but they greatly influence consumer behavior, leading to change.

ACKNOWLEDGEMENTS / REFERENCES

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***Works Cited:

