

Dehumanizing the Lowest of the Low:

Neuroimaging Responses to Extreme Out-Groups

Harris & Fiske (2006)

- **Stereotype Content Model (SCM)**
 - Predicts differentiated prejudices
 - Warm (high or low): Friend or foe? Help or harm?
 - Competent (high or low): Able to carry out intentions?

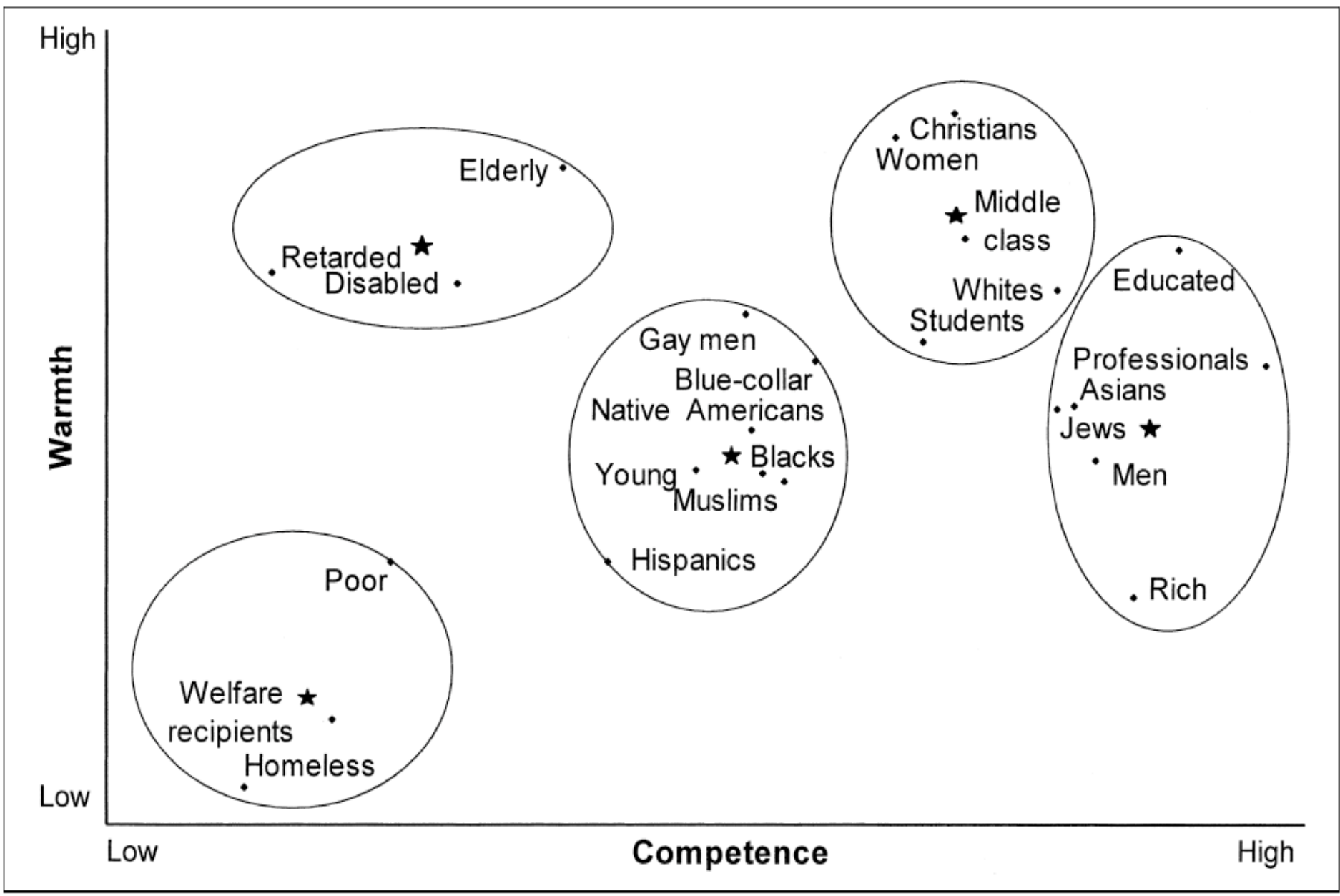


Fig. 1. Five-cluster solution showing the perceived distribution of American social groups, according to perceived competence and warmth (Fiske, Cuddy, Glick, & Xu, 2002, Study 2). Copyright by the American Psychological Association. Reprinted with permission.

SCM

- 2 x 2 matrix yields four emotions: Envy, Pride, Disgust, & Pity.

		Competence	
		Low	High
Warmth	High		
	Low		

SCM

- Disgust (low, low) is unique: it can target either humans or nonhumans (here, people = objects)
- Are those who are stereotyped low/low perceived as nonhumans (i.e., dehumanized)?

SCM

- MRI data demonstrate mPFC is activated when people make judgments about about people (social cognition), not objects.

TABLE 1

Groups and Objects Representing the Four Warmth × Competence Clusters of the Stereotype Content Model in Studies 1 and 2

Warmth	Competence	
	Low	High
High	<i>Pity</i> Elderly people Disabled people Cemetery (object control) Collapsed building (object control)	<i>Pride</i> Middle-class Americans American Olympic athletes U.S. space shuttle (object control) Princeton tiger statue (object control)
Low	<i>Disgust</i> Homeless people Drug addicts Overflowing toilet (object control) Vomit (object control)	<i>Envy</i> Rich people Business professionals Stack of money (object control) Sports car (object control)

Note. The emotion associated with each quadrant is indicated in italics. Participants in Study 1 viewed 48 photographs of the social groups listed. Participants in Study 2 viewed one image of each of the objects listed.

SCM

■ Study 1:

- Present pictures depicting the four SCM quadrants.
- Each picture rated on four emotions
- Question: did the pictures from each quadrant elicit the predicted emotions?

Quadrant			
Pride	Envy	Pity	Disgust
.70(.10)	.52(.10)	.83(.05)	.64(.06)

Pictures in each quadrant were rated as eliciting the predicted emotion at a rate well above chance. Standard errors are given in parentheses.

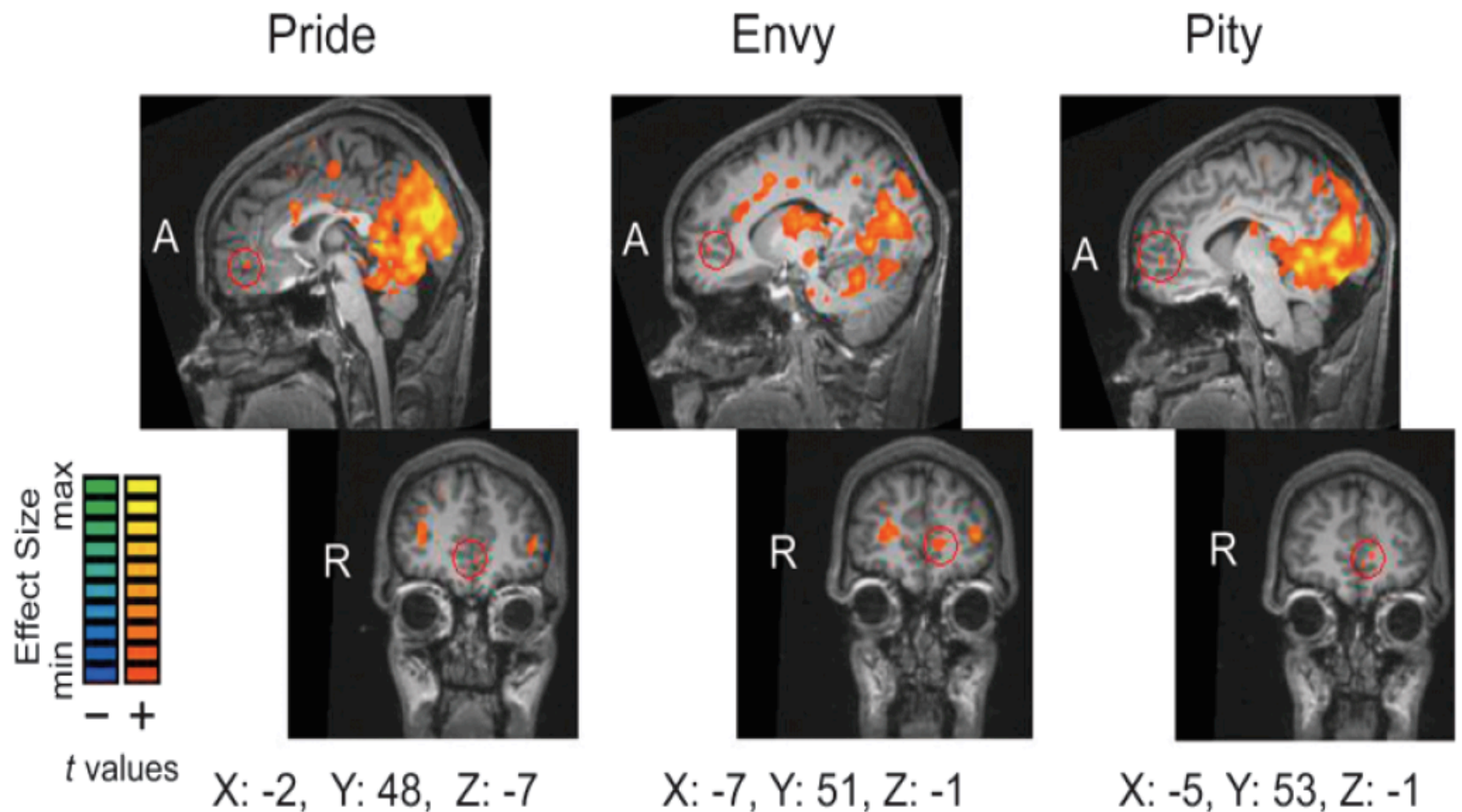


Fig. 1. Results of a subtractive analysis of blood-oxygen-level-dependent (BOLD) activations in Study 1. Activation during fixation was subtracted from activation while participants viewed pictures of social groups representing the four quadrants of the stereotype content model (SCM). Results for the three SCM cells (pride, envy, and pity) showing significant activation in medial prefrontal cortex (mPFC) are shown here. The coordinates are from Talairach and Tournoux (1988). The circled areas indicate mPFC activation. Positive t values indicate greater activation to the out-group pictures in the indicated quadrant, and negative t values indicate greater activation to the fixation cross. A = anterior; R = right.

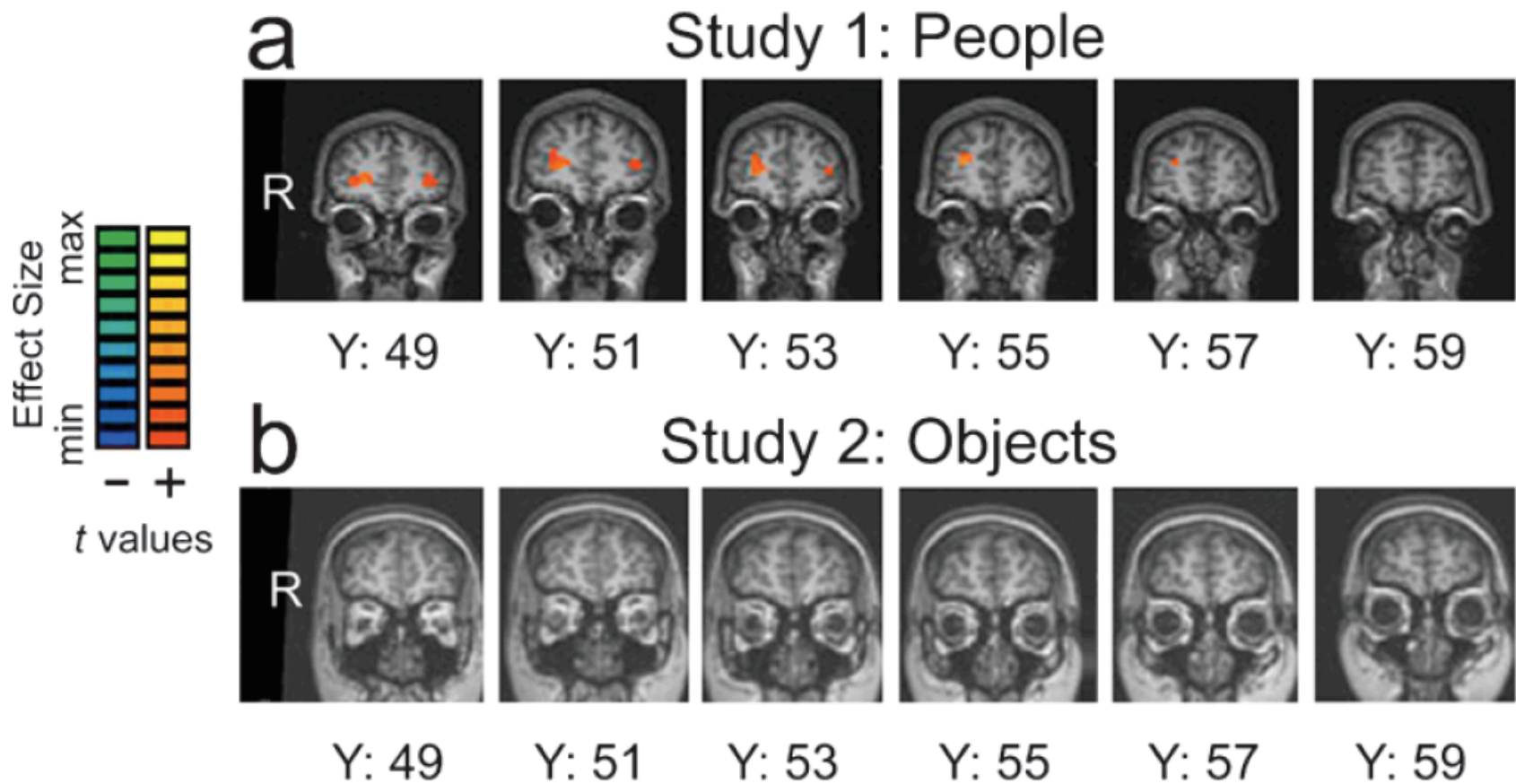


Fig. 2. Blood-oxygen-level-dependent (BOLD) activations when participants viewed (a) pictures of low-competence/low-warmth groups in Study 1 and (b) pictures of disgusting objects in Study 2. The Y coordinates are from Talairach and Tournoux (1988). Positive t values indicate greater activation to the out-group pictures in the indicated quadrant, and negative t values indicate greater activation to the fixation cross. R = right.

Note: The absence of the typical neural signature for social cognition in response to people who were seen as disgusting.

Infracommunication

Leyens et al., 2003

- Infracommunication: Some humans are considered less human than others
- The essence of humanness: language, intelligence, & secondary emotions
- But privilege can affect language and intelligence
- Secondary emotions: Response times shorter when secondary emotions associated with human (e.g., hair) versus nonhuman features (e.g., fur)
- Secondary emotions associated with humans, more so than animals

Primary, Secondary, & Tertiary Emotions (Plutchik, 1993)



Infrahumanization

Leyens et al., 2003

- Ingroup members more often select and associate secondary emotions with the ingroup; primary emotions associated more often with outgroup (Leyens et al., 2001)
- Using Implicit Association Test: Ingroup members (French or Spanish) more readily associated with primary emotions; outgroup members (Arabs or Flemish) more readily associated with secondary emotions than the reverse combination (Paladino et al., 2002)

Infrahumanization Effect

Leyens et al., 2003

- Is reciprocal: for dominant and non-dominant groups
- Increases with increases in-group identification
- Appears in conflict and non-conflict situations, though valence might be a factor

Infrahumanization

Leyens et al., 2003

- Infrahumanization is reduced
 - When perspective taking is used (Cortez, 2002)
 - When members of the outgroup are individualized (i.e., given first or last name!) (Leyens et al., 2003)
 - However, individualizing an outgroup member does not mean outgroup generalization will take place (Gaertner & Dovidio, 2000)

Enemy Images

- Diabolical Enemy Image (White, 1965)
- Image of the Enemy (Frank, 1967)
- Enemy Images (Holsti & Fagan, 1967)
- Image Theory (Cottam, 1977)
- Mirror Images (Bronfenbrenner, 1986)
- Enemy Images: A Cognitive Perspective (Silverstein, 1989)

Image Theory

Alexander, Levin, & Henry (2005)

- Fiske provided a reductionistic view of stereotypes
- In contrast, Alexander et al. are linking-up stereotypes with political structures
- Structural features of the relationship yield various image types
- Providing a more differentiated view of images

Image Theory

Alexander, Levin, & Henry (2005)

Structural Features of Relationship

1. Goal Compatibility (intent)



2. Relative Power (capability)



3. Relative Cultural Status



Image

Image Theory: Enemy as One Image Type

Alexander, Levin, & Henry (2005)

Structural Features of Relationship

Image Type

1. Goal Compatibility (**Low**)



2. Relative Power (**Equal**)



3. Relative Cultural Status (**Equal**)



Enemy

Enemy Image & Spiral Model of Interaction

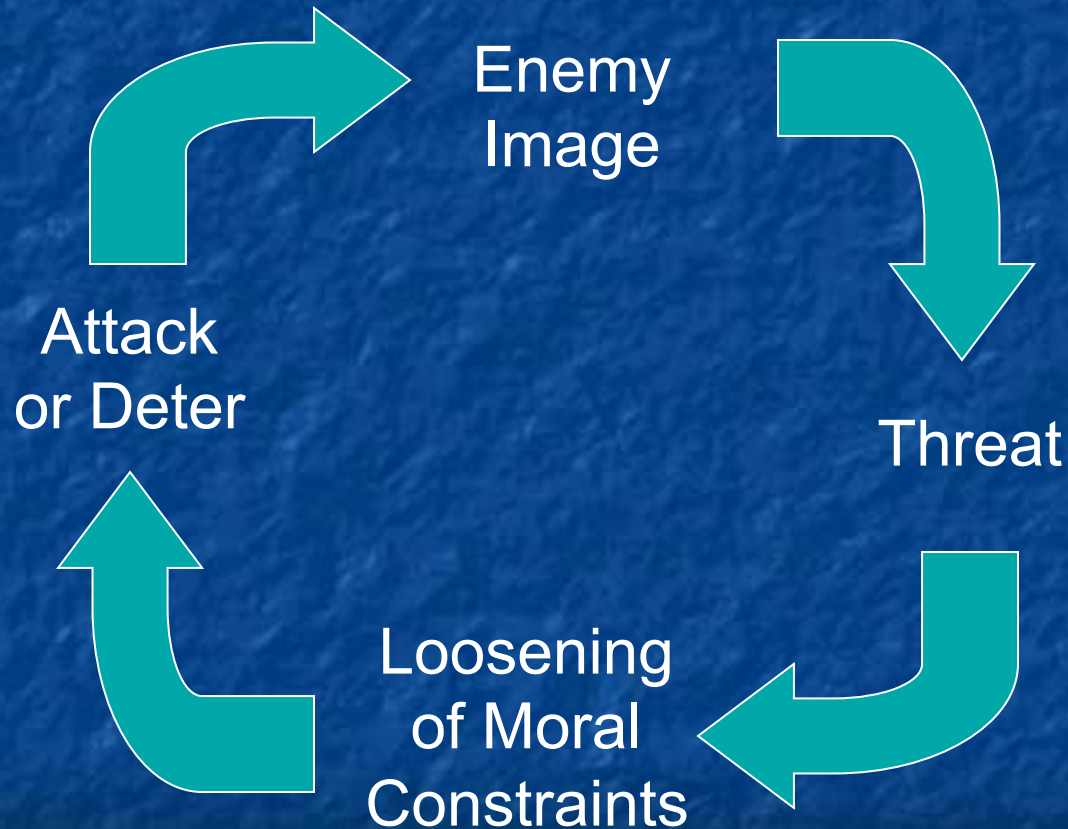


Table 1. Images of Other Nations as a Function of Goal Compatibility, Relative Status, and Relative Power

Relationship Pattern of Other Nation	Image of Other Nation
Goal compatibility Status Equal Power Equal	Ally
Goal incompatibility Status Equal Power Equal	Enemy
Goal incompatibility Status Lower Power Lower	Dependent
Goal incompatibility Status Lower Power Higher	Barbarian
Goal incompatibility Status Higher Power Higher	Imperialist

Note. Although it is possible that different configurations of the structural features of international relations could produce additional images, the specific relationship patterns and images we emphasize here are those identified by image theorists that are most likely to arise from different configurations of the international context (Herrmann & Fischerkeller, 1995). For purposes of the present study, we are only concerned with those images previously discussed by image theorists.

Image Theory

Alexander, Levin, & Henry (2005)

- Assumption: Accurate diagnosis (of relationship) leads to more accurate predictions of other nation's reactions
- International Images Vary Geohistorically:
 - US-Soviet Image during Cold War = Enemy
 - Iranian and Iraqi Images of US: From Ally to Imperialist (Herrmann & Fischerkeller, 1995)
- There is Within Group Variation in Images
 - Individual difference factors?

Image Theory

Alexander, Levin, & Henry (2005)

- What images characterize Arab nations' views of the US?
- Best guess: (1) incompatible goals, (2) US more powerful, and (3) US culturally inferior (Lewis, 1990) = Barbarian
- Intragroup variations: Arabs should have especially favorable image of their group relative to others if they
 - have strong group identification (according to SIT)
 - low social dominance orientation (i.e., do not favor and identify strongly with powerful groups)

Image Theory

Alexander, Levin, & Henry (2005)

- Group Identification and Social Dominance Orientation were individual difference variables
- It was expected that Group identification (e.g., High Arab, Palestinian, or Muslim identity; Low Christian and Western identity) and SDO would affect the degree of endorsement of Barbarian image, independent of Perceived Structure of the Relationship,

Image Theory

Alexander, Levin, & Henry (2005)

- Method: Query (a) Lebanese students' perceived international relationships and images of the US, (b) cultural and religious identities, and (c) social dominance orientation
- Results:
 - (1) Perceived structure (pattern) of relationship: incompatible goals, high power, low status
 - (2) Images: Barbarian most strongly endorsed
 - (3) (1) & (2) highly correlated
 - (4) status negatively correlated with barbarian

Image Theory

Alexander, Levin, & Henry (2005)

Table 2. Correlations between Individual Orientations and the Barbarian Image of the U.S., and Partial Correlations Controlling for Relative Power, Status, and Goal Incompatibility of the U.S.

Individual Orientation	<i>r</i>	Partial <i>r</i>
Arab Identification	.32***	.27**
Palestinian Identification	.39***	.32***
Muslim Identification	.19+	.06
Christian Identification	-.30*	-.29*
Western Identification	-.38***	-.30***
Social Dominance Orientation	-.30***	-.31***

+ $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$.

THE Atlantic

JUNE 2005

HOW WE WOULD FIGHT CHINA

THE NEXT COLD WAR
BY ROBERT D. KAPLAN

MANAGING CHINA'S RISE
BY BENJAMIN SCHWARZ



Toward a measure of patriotic and nationalistic attitudes

(Kosterman & Feshbach (1989))

- Floyd Allport hints at such a distinction (1927)
- Research in 1940s and 50s blur the distinction
- Research on the Authoritarian Personality (Adorno et al., 1950) blurred the distinction
 - One of the three ethnocentrism scales: Patriotism ...
“blind attachment to certain national cultural values, uncritical conformity with the prevailing group ways, and rejection of other national as outgroups (p. 107).”
- Doob (1964)
 - “There is no reason to suppose that the personality traits associated with love of country are the same as those connected with hostility toward foreign countries or foreigners (p. 128).”

Patriotic and Nationalistic Attitudes

- Mostly UCLA students (N = 239)
- Factor Analysis: six factor solution, accounting for 38% of the variance
- Factors: Patriotism, Nationalism, Internationalism, Civil Liberties, World Government, Smugness!

(Kosterman & Feshbach (1989))

Patriotism

Table I. Items and Factor Loadings for Factor 1

Items	Factor loadings (Varimax rotation)					
	1	2	3	4	5	6
10. I love my country.	(0.73)	0.08	-0.09	-0.08	0.11	0.23
25. I am proud to be an American.	(0.69)	0.03	-0.05	0.05	-0.02	0.29
76. In a sense, I am emotionally attached to my country and emotionally affected by its actions.	(0.67)	0.14	0.04	0.00	0.03	-0.13
39. Although at times I may not agree with the government, my commitment to the U.S. always remains strong.	(0.63)	0.05	-0.13	0.04	-0.11	0.12
113. I feel a great pride in that land that is our America.	(0.63)	0.31	-0.02	0.04	-0.03	0.18
29. It is not that important for me to serve my country.	(-0.61)	-0.01	0.08	0.16	0.04	0.06
23. When I see the American flag flying I feel great.	(0.61)	0.22	0.05	-0.15	-0.02	0.17
9. The fact that I am an American is an important part of my identity.	(0.57)	0.08	-0.06	-0.07	0.05	0.25
48. It is not constructive for one to develop an emotional attachment to his/her country.	(-0.52)	-0.04	0.03	-0.08	0.10	0.27
7. In general, I have very little respect for the American people.	(-0.50)	0.09	0.06	0.05	0.07	-0.07
20. It bothers me to see children made to pledge allegiance to the flag or sing the national anthem or otherwise induced to adopt such strong patriotic attitudes.	(-0.49)	-0.00	0.05	0.14	0.20	-0.01
50. The U.S. is really just an institution, big and powerful yes, but just an institution.	(-0.46)	0.06	0.08	0.09	0.26	0.07

Nationalism

Table II. Items and Factor Loadings for Factor 2

Items	Factor loadings (Varimax rotation)					
	1	2	3	4	5	6
28. In view of America's moral and material superiority, it is only right that we should have the biggest say in deciding United Nations policy.	-0.00	(0.59)	-0.08	-0.12	-0.12	-0.06
88. The first duty of every young American is to honor the national American history and heritage.	0.17	(0.55)	-0.02	-0.13	0.13	0.17
2. The important thing for the U.S. foreign aid program is to see to it that the U.S. gains a political advantage.	-0.04	(0.54)	-0.17	-0.13	-0.20	-0.01
85. Other countries should try to make their government as much like ours as possible.	0.12	(0.54)	0.02	-0.01	0.01	0.26
92. Generally, the more influence America has on other nations, the better off they are.	0.08	(0.52)	-0.21	-0.19	0.01	0.25
40. Foreign nations have done some very fine things but it takes America to do things in a big way.	0.09	(0.52)	0.02	-0.15	-0.11	0.19
34. It is important that the U.S. win in international sporting competition like the Olympics.	0.21	(0.50)	0.03	-0.18	-0.10	-0.15
67. It is really not important that the U.S. be number one in whatever it does.	-0.20	(-0.37)	0.17	0.24	0.20	0.16

Internationalism

Table III. Items and Factor Loadings for Factor 3

Items	Factor loadings (Varimax rotation)					
	1	2	3	4	5	6
44. If necessary, we ought to be willing to lower our standard of living to cooperate with other countries in getting an equal standard for every person in the world.	-0.12	-0.01	(0.68)	-0.03	0.17	0.02
74. The alleviation of poverty in other countries is their problem, not ours.	-0.05	0.32	(-0.66)	-0.05	-0.05	0.20
103. America should be more willing to share its wealth with other suffering nations, even if it doesn't necessarily coincide with our political interests.	-0.01	-0.15	(0.64)	0.10	0.22	0.00
93. We should teach our children to uphold the welfare of all people everywhere even though it may be against the best interests of our own country.	-0.07	-0.07	(0.59)	0.13	0.23	0.17
32. I would not be willing to decrease my living standard by ten percent to increase that of persons in poorer countries of the world.	-0.05	0.19	(-0.57)	0.17	0.02	0.11
110. Children should be educated to be international minded—to support any movement which contributes to the welfare of the world as a whole, regardless of special national interests.	-0.08	0.07	(0.56)	0.32	0.31	0.01
84. The agricultural surpluses of all countries should be shared with the have-nots of the world.	0.16	-0.08	(0.54)	0.25	0.00	-0.01
78. The position a U.S. citizen takes on an international issue should depend on how much good it does for how many people in the world, regardless of their nation.	0.02	0.05	(0.51)	0.18	0.33	0.07
116. Countries needing our agricultural surpluses should pay for them instead of getting something for nothing.	-0.05	0.32	(-0.40)	-0.06	-0.12	0.16

Civil Liberties

Table IV. Items and Factor Loadings for Factor 4

Items	Factor loadings (Varimax rotation)					
	1	2	3	4	5	6
57. A person who preferred jail to serving in the U.S. Army could still be a good American.	-0.08	-0.10	0.02	(0.50)	0.24	0.11
17. A person who does not believe in God could still be a good American.	0.14	-0.17	-0.12	(0.49)	0.07	-0.17
4. A person who believes in social-ism could still be a good American.	0.02	-0.24	0.11	(0.49)	0.08	-0.15
12. A person who doesn't stand when the Star Spangled Banner is being played could still be a good American.	-0.18	-0.13	-0.00	(0.47)	0.08	-0.15
102. It is O.K. to criticize the government.	0.11	-0.21	0.11	(0.46)	-0.03	0.01
109. We should have complete freedom of speech even for those who criticize the country.	0.02	-0.11	0.12	(0.46)	-0.01	-0.00
49. People who do not want to fight for America should live somewhere else.	0.16	0.20	-0.05	(-0.37)	-0.26	0.15

World Government

Table V. Items and Factor Loadings for Factor 5

Items	Factor loadings (Varimax rotation)					
	1	2	3	4	5	6
60. All national governments ought to be abolished and replaced by one central world government.	-0.27	-0.30	0.17	-0.08	(0.65)	0.02
56. I am not willing to surrender my allegiance to my country in order to give it to a world authority represented by all nations.	0.18	0.16	-0.13	-0.06	(-0.56)	0.30
58. We should immediately take steps toward establishing a world government.	-0.20	0.03	0.32	0.01	(0.55)	0.06
100. We should give the United Nations more power.	-0.00	0.10	0.28	0.19	(0.53)	0.05
55. The U.S. should never give up its military power to a strong world government.	0.12	0.30	-0.10	-0.13	(-0.52)	0.27
18. I could never be as loyal to a world government as I am to my national government.	0.26	0.15	-0.14	-0.04	(-0.52)	0.11

Smugness

Table VI. Items and Factor Loadings for Factor 6

Items	Factor loadings (Varimax rotation)					
	1	2	3	4	5	6
114. I would never settle in another country.	0.26	0.16	-0.13	-0.21	0.08	(0.46)
21. The American flag is the best in the world.	0.37	0.21	-0.12	-0.23	-0.02	(0.43)
15. I think the American people are the finest in the world.	0.37	0.24	-0.26	-0.02	-0.05	(0.42)
26. America is the best country in the world.	0.49	0.23	-0.19	-0.07	-0.05	(0.42)

Discriminant Validity

Table VII. Interfactor Correlations

Factors	2	3	4	5	6
1. Patriotism	0.28	-0.17	-0.24	-0.28	0.15
2. Nationalism	-	-0.18	-0.23	-0.18	0.33
3. Internationalism		-	0.28	0.29	-0.08
4. Civil Liberties			-	0.25	-0.02
5. World Government				-	-0.04
6. Smugness					-

Patriotism and Nationalism

- Only 8 percent of variance accounted for by civil liberties, world government, and smugness
- Patriotism: Attachment to nation
- Nationalism: National superiority and dominance
- Internationalism: Emphasis on sharing, welfare, empathy (egalitarian values)

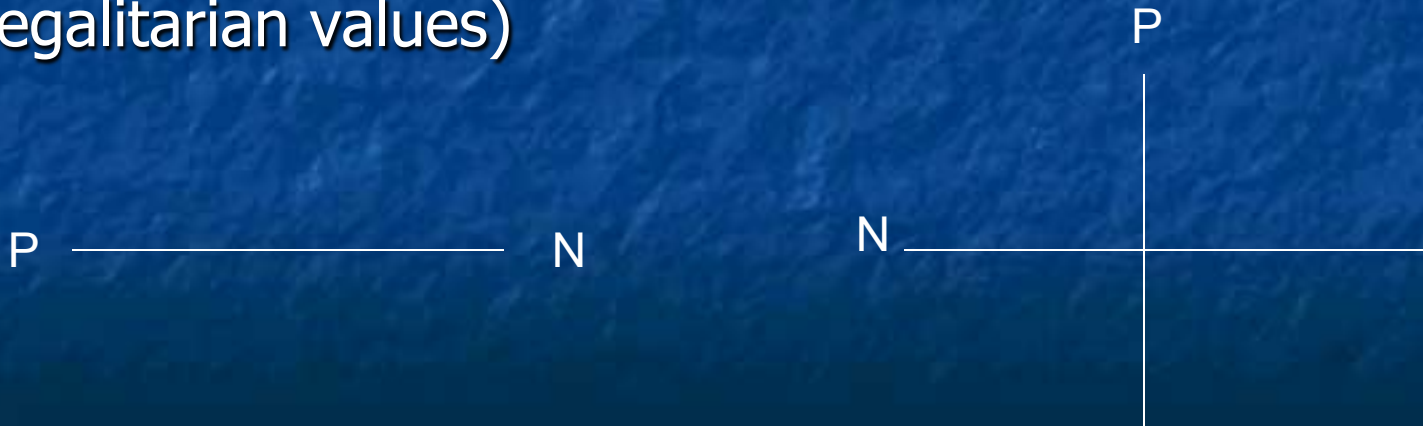


Table IX. Effects of Patriotic/Nationalistic Attitudes on Nuclear Policy Opinions

Patriotism/ Nationalism subscales	Nuclear Policy scale		Nuclear policy subscales					
			Soviet Union		Nuclear Freeze		Survivability	
	<i>r</i>	beta	<i>r</i>	beta	<i>r</i>	beta	<i>r</i>	beta
Patriotism	0.18	-0.07	0.26	0.00	0.03	-0.18 ^a	-0.05	-0.14
Nationalism	0.68	0.44 ^b	0.68	0.42 ^b	0.56	0.29 ^b	0.36	0.35 ^b
Internationalism	-0.56	-0.26 ^b	-0.53	-0.23 ^b	-0.54	-0.30 ^b	-0.31	-0.18 ^c
Civil Liberties	-0.57	-0.21 ^b	-0.56	-0.20 ^a	-0.59	-0.33 ^b	-0.23	0.00
World Government	-0.46	-0.09	-0.45	-0.07	-0.40	-0.06	-0.23	-0.07
Smugness	0.37	0.05	0.43	0.10	0.26	0.03	0.06	-0.10
Total adj. R ²	59.7%		57.8%		52.4%		17.1%	

^a*p* < 0.01.

^b*p* < 0.001.

^c*p* < 0.05.

Patriotism & Nationalism:
Statistically and functionally distinguishable