The Cognitive-Ecological Challenge of Diversity

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Challenges of Diversity

Increasing diversity in many societies (Plaut, 2010)

**Challenges:**

Reduced willingness to cooperate and increasing social conflicts (Abascal & Baldassarri, 2015; Alesina & Ferrara, 2000; Esteban, Mayoral, & Ray, 2012; Portes, 2014; Putnam, 2007; Ramos, Bennett, Massey, & Hewstone, 2019)

Social Psychology: Negative attitudes towards novel/unfamiliar groups (out-groups, minorities) (Hewstone, Rubin, & Willis, 2002; Jonas et al., 2014; Smith & Mackie, 2015)

Dominant Explanation: Motivation

- **Self-serving motives** (Abrams & Hogg, 1988; Brewer, 2003; Gaertner & Insko, 2000; Tajfel & Turner, 1979)
A Cognitive-Ecological Perspective

Novel Perspective:
Challenges of increasing diversity and emergence of social conflicts also have non-motivated causes.

Cognitive Principles
- Information Processing
- Learning
- Communication

Evaluative Information Ecology
- Structure and distribution of evaluative information

AI would form similar biases!
Three Example Projects

**Example 1:** Diversity, Complexity and Negative Attitudes

**Example 2:** Negative Attitudes towards Novel Groups, Out-groups, and Minorites

**Example 3:** Why Stereotypes are Negative
Example 1: Complexity and Negative Attitudes

**Information Ecology:** Negative Behavior is rare – Most people are „good“ most of the time (Alves et al., 2017a)

**Cognition:** Learning is „noisy“ and therefore regressive (Fiedler, 1991; Furby, 1973)

**Diversity** = More groups -> more noisy learning -> stronger regression -> more negative attitudes

**Hypothesis:** In a more diverse environment, the perceived prevalence of „bad people“ increases and attitudes become increasingly negative
Example 2: Negative Attitudes towards Novel Groups, Out-groups, and Minorities

Two Assumptions:

Cognition

• **Differentiation Principle:** Novel / unfamiliar attitude objects (e.g. groups) are associated with distinct attributes

Evaluative Information Ecology:

• **Distinct** attributes tend to be **negative**

**Hypothesis:** Evaluative disadvantage for novel groups, out-groups, and minorities
Example 2: Negative Attitudes towards Novel Groups, Out-groups, and Minorities

**Cognition:** Differentiation Principle

![Diagram showing typical object, novel object, redundant attributes (background), and distinct attributes (figure).](image)

(Alves, 2018, PSPB; Alves et al., 2018, PSCI; Alves et al., 2020, JPSP)

(See also: Agnostelli et al., 1986; Bruner & Perlmutter, 1957; Fiske, 1980; Houston et al., 1989, 1991; Hodges, 2005; Kanouse & Hanson, 1972; Kardes & Sanbonmatsu, 1993; Wyer, 1975)
Example 2: Negative Attitudes towards Novel Groups, Out-groups, and Minorities

Evaluative Information Ecology:

Distinct attributes tend to be negative attributes

Shared attributes tend to be positive attributes

The “Common Good” Phenomenon
(Alves et al, 2017, JEP:G; Alves et al., 2017, TICS)
Example 2: Negative Attitudes towards Novel Groups, Out-groups, and Minorities

1. Negative attributes are more diverse than positive attributes.
   e.g. faces, traits, individuals, words, emotions, etc.
   (e.g. Alves et al., 2015, M&C; Alves et al., 2016, JESP; Alves et al., 2017, TICS; Alves et al., 2018, C&E)

2. Positive attributes are more frequent than negative attributes.
   (e.g. Alves et al., 2017, Jep; Rothbart & Park, 1986; Matlin & Stang, 1978; Wood & Furr, 2016)

Negative attributes = distinct
Distinct attributes = negative
Example 2: Negative Attitudes towards Novel Groups, Out-groups, and Minorities
Example 3: Why Stereotypes are Negative

[Image of bar chart showing valence ratings for different groups]
Example 3: Why Stereotypes are Negative

Stereotypes

• Are **NOT** attributes that apply to **most** members of a group

• Are attributes that best **differentiate** a group

• Negative attributes are rare -> better differentiation
Example 3: Why Stereotypes are Negative

**Diagnisticity** (Alves et al., 2023; Cimpian et al., 2010)

Friendly members -> almost no difference
But 2.5 times as many unfriendly members!
Example 3: Why Stereotypes are Negative

**Diagnisticity** (Alves et al., 2023; Cimpian et al., 2010)

Stereotype: “This group is unfriendly”
Conclusions

• Increasing diversity constitutes a **challenge** even **beyond** people’s **self-serving motivations**

• Negative attitudes and stereotypes towards social groups can result from **basic cognitive principles** (e.g., noisy learning, differentiation) and the **structure** of the **information environment**

• Important to understand that **refugees** and **other minority groups** suffer **evaluative disadvantages** even when perceivers are **not motivated** to derogate them

Implications

• Blame game not helpful

• Instead: Re-learning (intergroup contact; careful media reporting, education)
Thank You!