## When the Self Stands Out: Figure–Ground Effects on Self-Focused Attention

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**TABLES AND FIGURES CAN BE FOUND AT THE END OF THE ARTICLE.**

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**Abstract:**

When do people focus attention on the self? Based on Gestalt notions of figure–ground assignment, two experiments demonstrated that making self figural against a background induces self-focused attention. In Experiment 1, perceiving figural self-symbols increased self- awareness relative to perceiving background self-symbols. In Experiment 2, making self figural against the background of a 6-person decision-making group increased self-awareness. These experiments clarify the antecedents of self-awareness and connect objective self-awareness theory to research on interpersonal deviancy. Keywords: self-awareness, self-focused attention, distinctiveness, figure–ground, deviance

**Article:**

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Objective self-awareness theory (Duval & Silvia, 2001; Duval & Wicklund, 1972) connects the self to motivation and activity via *self-focused attention*. Directing attention toward self affects a broad range of psychological processes. Self-focused people can evaluate the self against standards of correctness (Scheier & Carver, 1983). If people fall short of their standards, they make attributions for the resulting discomfort. People might eventually accept or deny responsibility for failure, blame others for their own failings, or avoid self-focus (Duval & Lalwani, 1999; Duval & Silvia, 2002; Moskalenko & Heine, 2003; Silvia & Duval, 2001a).

Despite the large literature on the *effects* of self-awareness, relatively few experiments explore the *antecedents* of self-awareness. Many experiments have manipulated self-focused attention and measured its direct and interactive effects on a host of dependent variables. Few studies, however, have explored what makes people self-focused in the first place. Given the importance of self-awareness for self-regulation and motivated cognition, understanding the antecedents of self-focus is essential. The present experiments thus address this issue.

## What Makes People Self-Aware?

Duval and Wicklund (1972) suggested many creative ways of manipulating self- awareness, and many new methods have been developed since then. Despite their apparent diversity, all manipulations of self-awareness try to make the self salient by directing attention onto some aspect of the person. The best-known manipulations do this bluntly, by showing people their faces in mirrors (Carver & Scheier, 1978) and video monitors (Duval, 1976), by playing recordings of people's voices (Ickes, Wicklund, & Ferris, 1973), or by introducing observers (Scheier & Carver, 1983). Other ways to direct attention to the self include writing self-descriptive essays or completing personality scales (Brown, 1988; Fenigstein & Levine, 1984).

One source of self-awareness is based on Gestalt perceptual principles (Köhler, 1929). Duval and Wicklund (1972) reasoned that making the self figural against a background of other people—making the self "stand out"—would increase self-awareness. For a field separated into regions, the smaller region will be figural and thus attract attention (Koffka, 1935). Attention is predicted by the ratio of the smaller area to the larger area. The figure–ground approach has not been widely studied. In one experiment, the researcher calculated the participant's astrological diagram (Mayer, Duval, Holtz, & Bowman, 1985). Some people learned that their diagram was shared by half of the population; others learned that their diagram was unusual. People feeling figural relative to the population took more responsibility for helping someone in need. Other experiments manipulated self-focus by asking people to describe how they differ from their friends and relatives (Eichstaedt & Silvia, in press; Silvia, 2002). Relative group size affects group dynamics in a manner consistent with self-awareness theory (Mullen, 1983; Wegner & Schaefer, 1978). These studies can be interpreted in figure–ground terms, but they are nevertheless indirect tests.

It is unfortunate that figure–ground effects on self-awareness have received little attention. The well-known ways of making people self-aware are uncommon in everyday life—few people work in front of large mirrors or video monitors—and these methods are relatively non-social. Figure–ground effects, in contrast, illuminate social contexts of self- awareness. People often feel distinctive relative to their social context, such as when they have an unusual feature (e.g., tokens and deviants; Frable, 1993). Figure–ground principles thus connect self-awareness to interpersonal processes, an area in which the theory has not been widely applied.

The present experiments manipulated a situation's figure–ground structure and then measured self-awareness. In Experiment 1, we manipulated the relative frequency of symbols of the self. Some people viewed self-symbols—personal pronouns—that were figural against a background of non-self symbols; others viewed figural non-self symbols against a background of self-symbols. In Experiment 2, we manipulated figure–ground status in an interpersonal context. Some people were distinctive within a group, whereas others were not distinctive. The experiments extend past research on the sources of self-awareness by demonstrating that making the self stand out relative to the context will increase self-focused attention.

Experiment 1

*Method*

*Participants and Design*

Forty students enrolled in undergraduate psychology courses at the University of Southern California volunteered to participate and received extra credit. People were randomly assigned to one of two conditions: an *I-figural* condition or an *I-ground* condition.

*Procedure*

The participant was escorted into a small room that contained a table and chair. A 9" × 9" × 9" cube of wooden blocks was on the table, with a sign that read "Please do not disturb (Exp. 00-04-978)." The sign was meant to give the impression that the cube belonged to a different study. The face of the cube had nine blocks printed with an *I* or a *They.* In the *I -figural condition,* an *I* was on the center block in the grid and surrounded

by eight *They* blocks (Figure 1, top panel). In the *I-ground condition*, a *They* was on the center block and surrounded by eight *I*

blocks (Figure 1, bottom panel). The experimenter expressed concern about the cube, but he said that it would probably be okay to use the room. The experimenter explained that the study's purpose was to examine the properties of spontaneous thinking. The participant's task was to complete a worksheet designed to assess ways in which people think spontaneously.

Before giving the worksheet to the participant, the experimenter decided to make sure they could stay in the room without interruptions. He left the room and made a bogus phone call, audible to the participant. During the call the experimenter made it clear that using the room was a problem. The purpose of this procedure was to leave the participant facing the cube for 60 seconds without any other visual distractions. After completing the call, the experimenter returned and said that they would have to move to another room.

After moving, the participant completed the "Linguistic Implications Form," a measure of self-awareness (Wegner & Giuliano, 1980). This scale consists of sentences that lack pronouns. Participants choose the pronoun that they feel best fits the sentence. The choices consist of 1 self- relevant pronoun (*I*, *me*, or *my*) and two filler pronouns (e.g., *she*, *they*). One item, for example, reads "Someone stopped (*them, me, us*) to get directions to the stadium." The dependent measure is the percentage of sentences completed with self-relevant pronouns. The sentence- completion task is among the most widely-used measures of self-focused attention. Unlike other measures, it enables a comparison of the level of self-focus relative to a level expected by chance. If people select pronouns randomly, 33% of their selections will be self-relevant pronouns.

### Results and Discussion

First, we tested whether people in the I-figural condition chose more self-relevant

pronouns than participants in the I-ground condition (see Table 1). As predicted, viewing *I* in a

figural position was more self-focusing than seeing *I* in a background position, $t(38) = 3.06$, $p < .004$, $d = .97$. (Effect sizes were calculated with MINSIZE 2; Morse, 1999). Second, we tested whether the percentage of self-

relevant pronouns selected in each condition differed from chance (33.3%). A one-sample *t*-test found that the percentage of self-relevant pronouns chosen in the I-figural condition significantly differed from the percentage expected by chance, $t(19) = 3.54$, $p < .002$, $d = .79$. The percentage of self-relevant pronouns chosen in the I-ground condition, however, did not differ from chance, $t(19) = .77$, $p < .45$, $d = .17$.

The experiment's results thus demonstrate a figure-ground effect on self-focused attention. We should note that the findings are inconsistent with a simple priming explanation, in which viewing the pronoun *I* primed selecting self-relevant pronouns. People in the I-ground condition viewed the most *I*s and hence should have had a stronger priming experience, but they selected fewer self-relevant pronouns.

## Experiment 2

Our first experiment found that the figure–ground status of self-symbols influenced self- awareness. Experiment 2 replicated these effects in an interpersonal context. Showing that "sticking out" in relation to a social group increases self-awareness can connect self-awareness theory to interpersonal phenomena, such as deviance (Frable, 1993). To avoid creating discrepancies on important dimensions, we created figure–ground differences that involved noncentral aspects of the self. People were in a decision-making group that used different colors of paper. Some people thought that they would be the only group member with yellow paper; other people thought that half the group, including the self, would use yellow paper. This dimension does not involve features central to the participants' self-concepts, and most people probably lack standards regarding paper color.

Experiment 2 created a stricter test of the figure–ground hypothesis by using a more conservative comparison group. People in the figural condition had a feature that was unique among the six people (1 vs 5); people in the not-figural condition had a feature that was shared by half of the six people (3 vs 3). In this condition, the self should neither stick out nor merge into the background. As a comparison, recall that Experiment 1's figural condition (1 vs 8) was contrasted with a condition in which the self-symbols formed the background (8 vs 1).

### *Method*

*Participants and Design*

Twenty-four students enrolled in General Psychology at the University of North Carolina at Greensboro (UNCG) participated as part of a research option. People were randomly assigned to one of two conditions—*figural* and *not -figural*—using randomized blocks.

*Procedure*

Participants arrived in groups of six. The experimenter seated them at individual tables in a large room. He explained that the experiment was about the dynamics of group decision- making and the many factors that might influence group processes. In particular, the experiment ostensibly focused on aspects of the physical environment that might affect group interaction. The participants expected to complete some questionnaires individually and then to work together on a problem-solving task. The task was a "winter survival task," in which the group had to decide which objects should be selected to survive a snowstorm. Each participant received a description of the task along with a "Pre-Task Questionnaire." The questionnaire was ostensibly intended to get background information on each person's attitudes, opinions, and personality

traits, so that the dynamics of the group's discussion could be better understood. The figure–ground manipulation was carried out in the description of the group decision-making task. People read that different groups would work under slightly different conditions, in order to find out which conditions promoted the best decisions. The description emphasized that many of the differences were slight and unimportant but were included on an exploratory basis.

Participants read that their group would move their desks into a circle so that all members could see each other, whereas some other groups would work with their desks in two parallel rows. Likewise, some groups, such as their group, could take notes during the discussion, whereas other groups could not take notes. Among the groups that could take notes, different colors of paper would be distributed to see if taking notes on unusual colors of paper could affect the group's decision processes. Participants in the *figural* condition learned that they would write on yellow paper and the other five group members would write on blue paper. Participants in the *not -figural* condition learned that three group members (including the participant) would write on yellow paper and three group members would write on blue paper. (Blue and yellow are UNCG's school colors.) All

participants learned that the different colors of paper were randomly determined and did not indicate different levels of status or different functions in the group.

A full-color diagram followed the instructions. This diagram depicted the arrangement of the desks according to each group member's color of paper. An arrow pointing to a yellow square noted "You." Figure 2 shows a black-and-white version of the two diagrams. In the figural condition, one square was yellow and the other five squares were blue (top panel, Figure 2). The infrequency of self in relation to the social field should make self appear figural and the other five people appear as the background. In the not-figural condition, the six squares alternated between

three yellow and three blue squares (bottom panel, Figure 2). After reviewing the figure–ground information, people completed a measure of "expressive fluency," actually the sentence- completion measure of self-awareness (Wegner & Giuliano, 1980).

## *Results and Discussion*

Self-focus was computed as in Experiment 1 (see Table 2). As predicted, people in the figural condition reported higher self-focus relative to people in the not-figural condition, $t(22) = 2.16$, $p < .042$, $d = .88$. We then tested if each condition differed from the percentage of self- relevant pronouns expected by chance (33.3%). The figural condition differed significantly from the chance level, $t(11) = 4.62$, $p < .001$, $d = 1.33$. The not-figural condition differed marginally from chance, $t(11) = 1.92$, $p < .08$, $d = .55$. Experiment 2 thus replicates and extends Experiment 1. Like the first study, it found that making self figural increases self-focused attention. Moving beyond replication, Experiment 2 demonstrated figure–ground effects on self-focus in an interpersonal context. Finally, Experiment 2 found the effect using a non-central aspect of self and a more conservative comparison condition, in which self was neither figure nor ground.

## General Discussion

A large literature describes the effects of self-focused attention (Silvia & Duval, 2001b), but few studies have systematically addressed the antecedents of self-focus. The present experiments tested whether figure–ground processes affect self-focused attention. A few studies have used manipulations based on relative

magnitude, but there has been no systematic look at how figure–ground principles influence the intensity of self-focused attention. Both experiments—using different manipulations of figure–ground—supported the figure–ground approach. In Experiment 1, perceiving *I* in a figural position was more self-focusing than perceiving *I* in a background position. In Experiment 2, perceiving that an aspect of self is figural within a social group increased self-focused attention. Both experiments directly support the figure–ground hypothesis and thus fill a gap in the self-awareness literature.

We do not view figure–ground methods as causing a qualitatively different "type" of self- awareness. To the contrary, objective self-awareness theory has long maintained that self- awareness is a unitary construct that can be manipulated many different ways (Duval & Wicklund, 1972). As we noted earlier, methods of inducing self-awareness rely on making the self salient. Figure–ground assignment is one way to direct attention to self. Statistical infrequency renders an aspect of self salient, such that it seems to "pop out" of the surrounding situation. The basic dynamics involved in self-awareness should be the same, regardless of the inducing event.

The present findings suggest parallels between self-awareness and deviancy, the experience of differing from others (Freedman & Doob, 1968). Deviants are more likely to take their interaction partner's perspective (Frable, Blackstone, & Scherbaum, 1990), to describe themselves as unique (Frable, 1993), and to have lower self-esteem (Frable, Platt, & Hoey, 1998). According to the present experiments, deviants should be more self-focused than non-deviants. Congruent with this position, the effects of manipulated self-awareness parallel the effects of deviancy. Self-focused people show increased perspective-taking (Stephenson & Wicklund, 1983), describe themselves as unique (Ickes, Layden, & Barnes, 1978), and sometimes experience lower self-esteem (Ickes et al., 1973). The figure–ground approach is a promising way of bridging these literatures and thus extending self-awareness theory into interpersonal domains.

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Table 1

*Effects of Making Self-Symbols the Figure or the Ground on Self-Focus: Experiment 1*

|  | M | SD |
|---|---|---|
| I-Figural | .44 | .135 |
| I-Ground | .31 | .133 |

*Note.* Higher scores reflect higher levels of self-focus. $n = 20$ per condition.

Table 2

*Effects of Figure–Ground Status on Self-Focus: Experiment 2*

|  | M | SD |
|---|---|---|
| Self is Figural | .48 | .109 |
| Self is Not Figural | .38 | .098 |

*Note.* Higher scores reflect higher levels of self-focus. $n = 12$ per condition.

Figure 1

*Representation of the stimulus patterns used in Experiment 1*

*I-Figural Condition*

| They | They | They |
|---|---|---|
| They | I | They |
| They | They | They |

*I-Ground Condition*

| | | |
|---|---|---|
| I | I | I |
| I | They | I |
| I | I | I |

# Figure 2

*Representation of the figure–ground manipulation in Experiment 2*