

SEEING THE INVISIBLE IN THE VISIBLE...

IBCB

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Brandon Anthony

***“... since the creation of the world
God’s invisible qualities - his eternal
power and divine nature - have been
clearly seen, being understood from
what has been made, so that people
are without excuse.”
(Romans 1:20)***

“For as bats eyes are to daylight, so is our intellectual eye to those truths which are, in their own nature, the most obvious of all.”

(Aristotle, *Metaphysics*, 1: First Principles)

***“...Come forth into the light of things,
Let nature be your teacher...”***

(William Wordsworth, *The Tables Turned*, 1798)

Biomimicry: UltraCane[®]



Biomimicry: Mussel/mollusc epoxy



Biomimicry: Fans & pumps



**“Go to the ant, you sluggard;
consider its ways and be wise!”**

(Proverbs 6:6)



Fire ant (*Solenopsis invicta*)



Fire ants self-assemble into waterproof rafts to survive floods

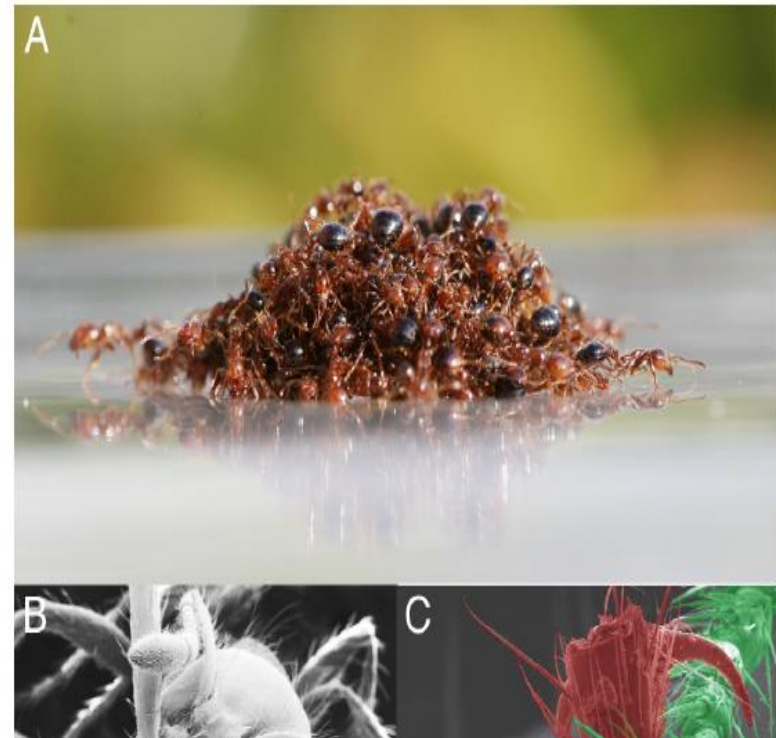
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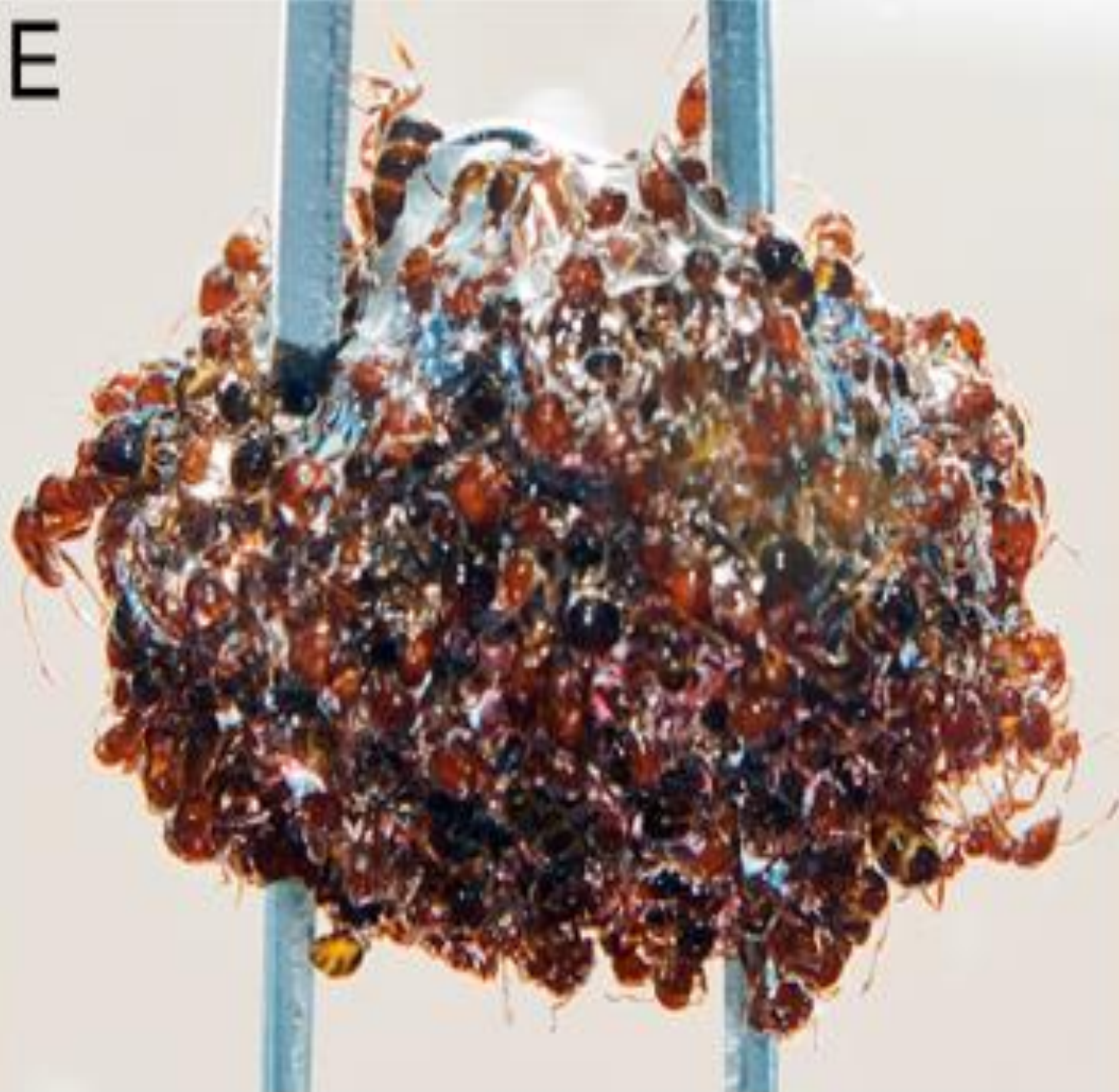
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Why does a single fire ant *Solenopsis invicta* struggle in water, whereas a group can float effortlessly for days? We use time-lapse photography to investigate how fire ants *S. invicta* link their bodies together to build waterproof rafts. Although water repellency in nature has been previously viewed as a static material property of plant leaves and insect cuticles, we here demonstrate a self-assembled hydrophobic surface. We find that ants can considerably enhance their water repellency by linking their bodies together, a process analogous to the weaving of a waterproof fabric. We present a model for the rate of raft construction based on observations of ant trajectories atop the raft. Central to the construction process is the trapping of ants at the raft edge by their neighbors, suggesting that some “cooperative” behaviors may rely upon coercion.

cooperative animal behavior | surface tension | adhesive | emergent | differential equation



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“No matter what you do, they are always constantly rearranging their bodies to respond to stresses. Where someone pushes on them, they initially act like a solid, but if you leave the plate, there they will also flow and respond. There are very few materials that act like that.”

(David Hu, <http://www.livescience.com/41531-fire-ant-rafts-solid-and-liquid.html>)

Application??

1. the **quality** of our relationships is important
2. our floating raft requires **unity** in our relationships (1 Cor. 12:21-26)
3. there is a **purpose** in our relationships (Eph. 4:16)
4. we need **security** in our relationships
5. God arranges the body as He sees fit, and for **His ultimate purposes** (1 Cor. 12:4-30)

Religion, Social Networks, and Life Satisfaction

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Abstract

Although the positive association between religiosity and life satisfaction is well documented, much theoretical and empirical controversy surrounds the question of how religion actually shapes life satisfaction. Using a new panel dataset, this study offers strong evidence for social and participatory mechanisms shaping religion's impact on life satisfaction. Our findings suggest that religious people are more satisfied with their lives because they regularly attend religious services and build social networks in their congregations. The effect of within-congregation friendship is contingent, however, on the presence of a strong religious identity. We find little evidence that other private or subjective aspects of religiosity affect life satisfaction independent of attendance and congregational friendship.

“For life satisfaction, what matters is how involved one is with a religious community, not whether that community is Baptist, Catholic, or Mormon.”
(p. 920)

“The effects of religious social networks do not depend on religious similarity among close social ties, but on regular encounters and shared religious experiences with congregational friends.” (p. 924)

“...a strong sense of religious identity may be the key factor setting congregational friendship apart from other social networks... effects of a strong religious identity on life satisfaction are reinforced by a close-knit friendship network in a congregation.” (p. 924)

“People who believe in God or heaven with an absolute certainty do not differ significantly from those who have less certain views.” (p. 926)

Conclusions:

“... People with religious affiliations are more satisfied with their lives because they attend religious services frequently and build intimate social networks in their congregations...”

Conclusions:

“...in terms of life satisfaction, it is neither faith nor communities, per se, that are important, but communities of faith. For life satisfaction, praying together seems to be better than either bowling together or praying alone.” (p. 927)