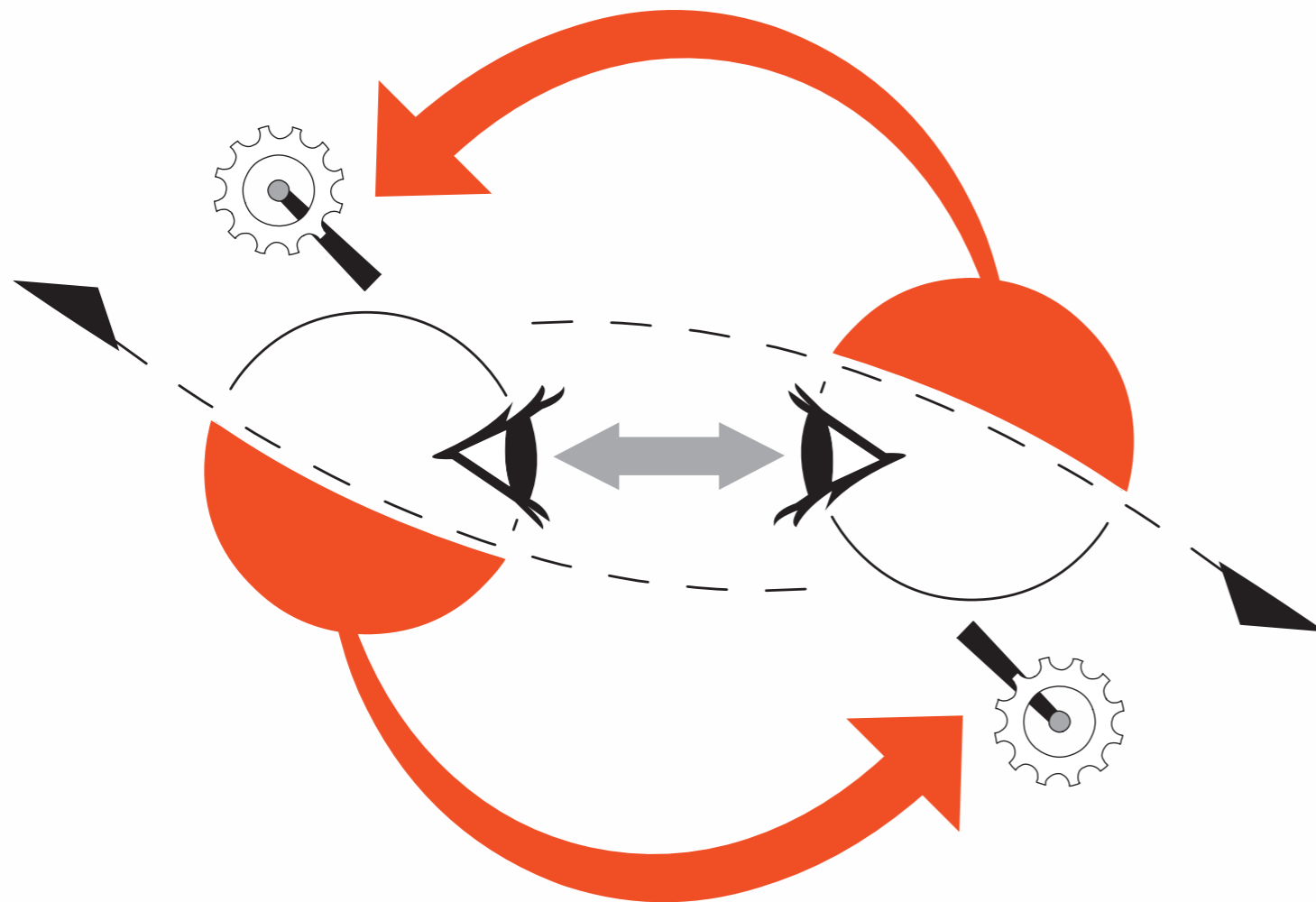


designing for conversation



@ IDEO Cambridge

paul pangaro, ph.d.
paul @ CyberneticLifestyles.com
30 April 2009

context

- ▶ explosion of digital media formats
- ▶ explosion of social media
- ▶ explosion of user-generated content
- ▶ mobility a.k.a. ubiquity
- ▶ “network of objects” revolution
- ▶ “conversational media”
- ▶ HTML, audio, video, XML...
- ▶ Facebook, MySpace, LinkedIn...
- ▶ Blogosphere, Wikipedia, YouTube...
- ▶ Twitter, Dopplr, Triplt...
- ▶ Pachube...
- ▶ all the above

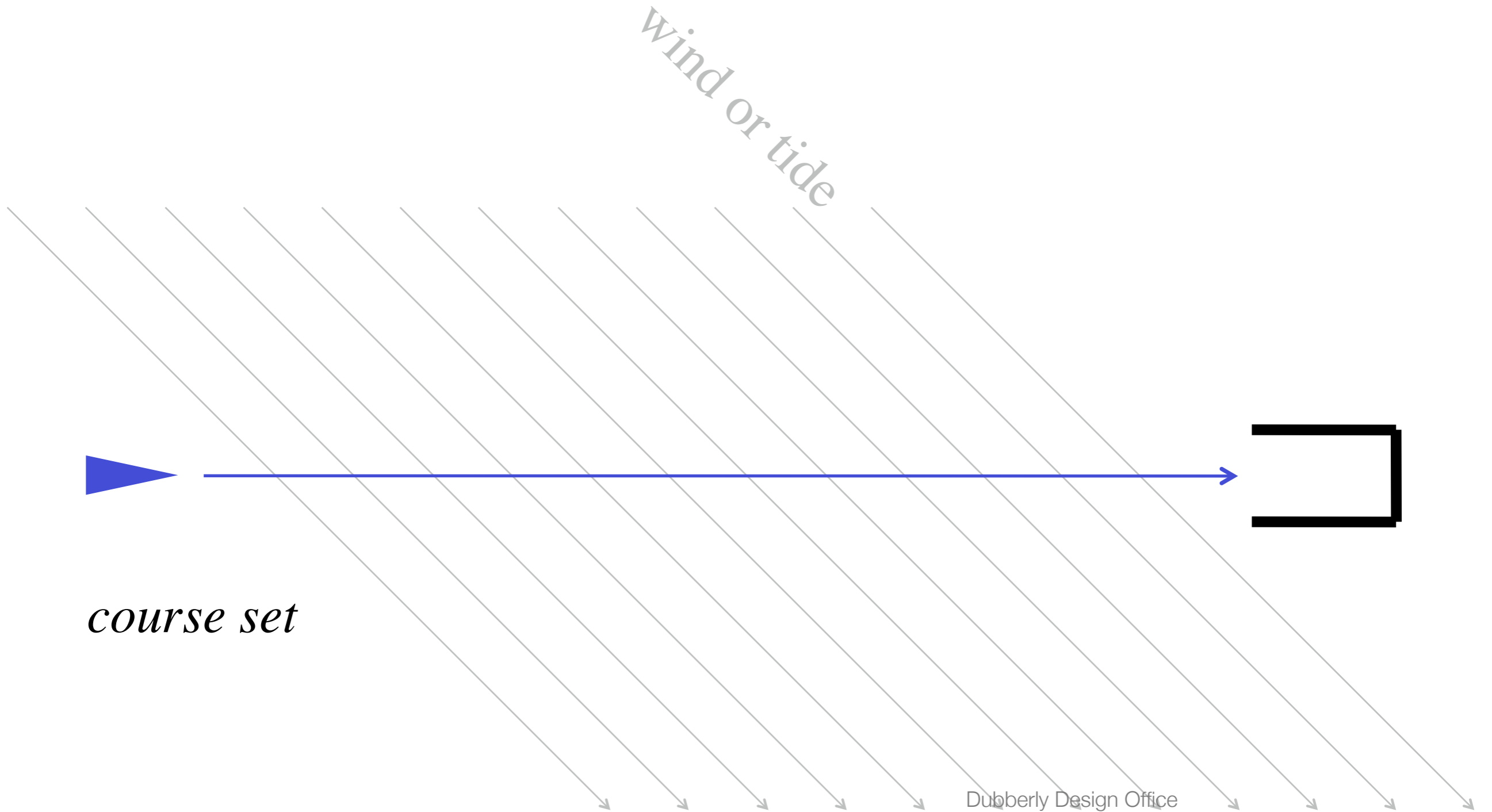
if all this is heading toward “conversation”...

how do we design for conversation?

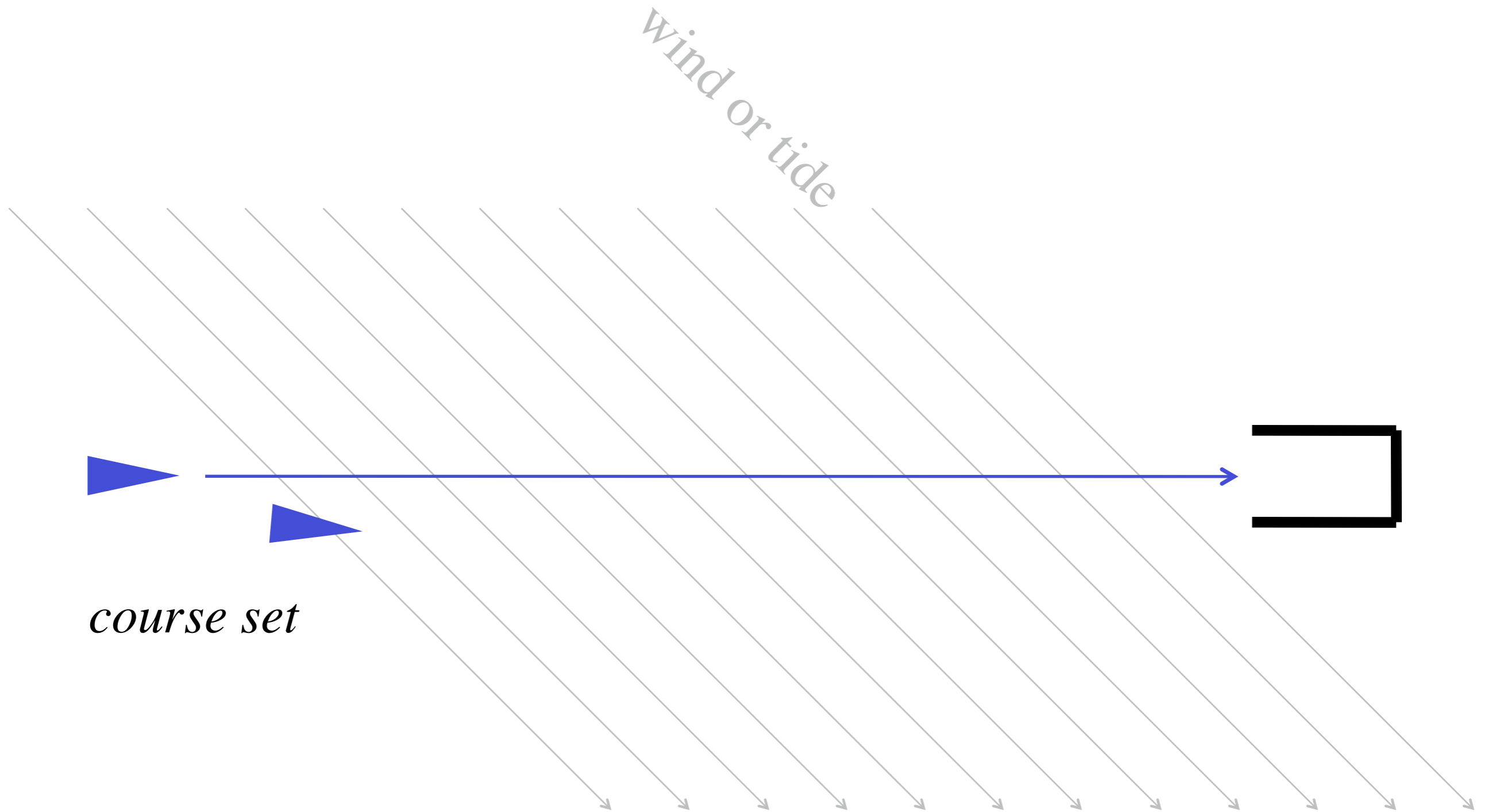
by applying cybernetics

- ▶ **what is cybernetics?**
- ▶ **how does cybernetics help us design?**

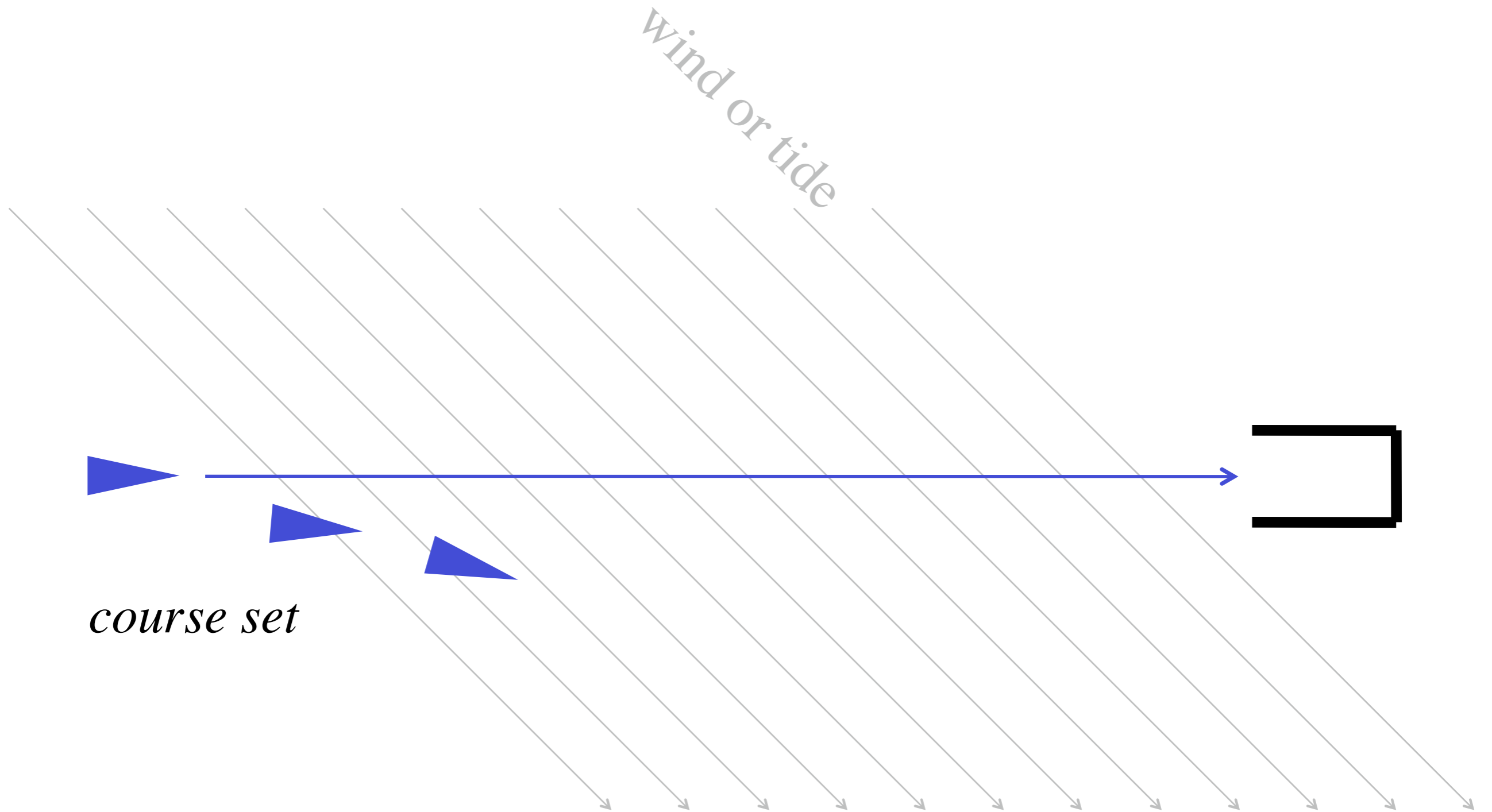
the science of steering



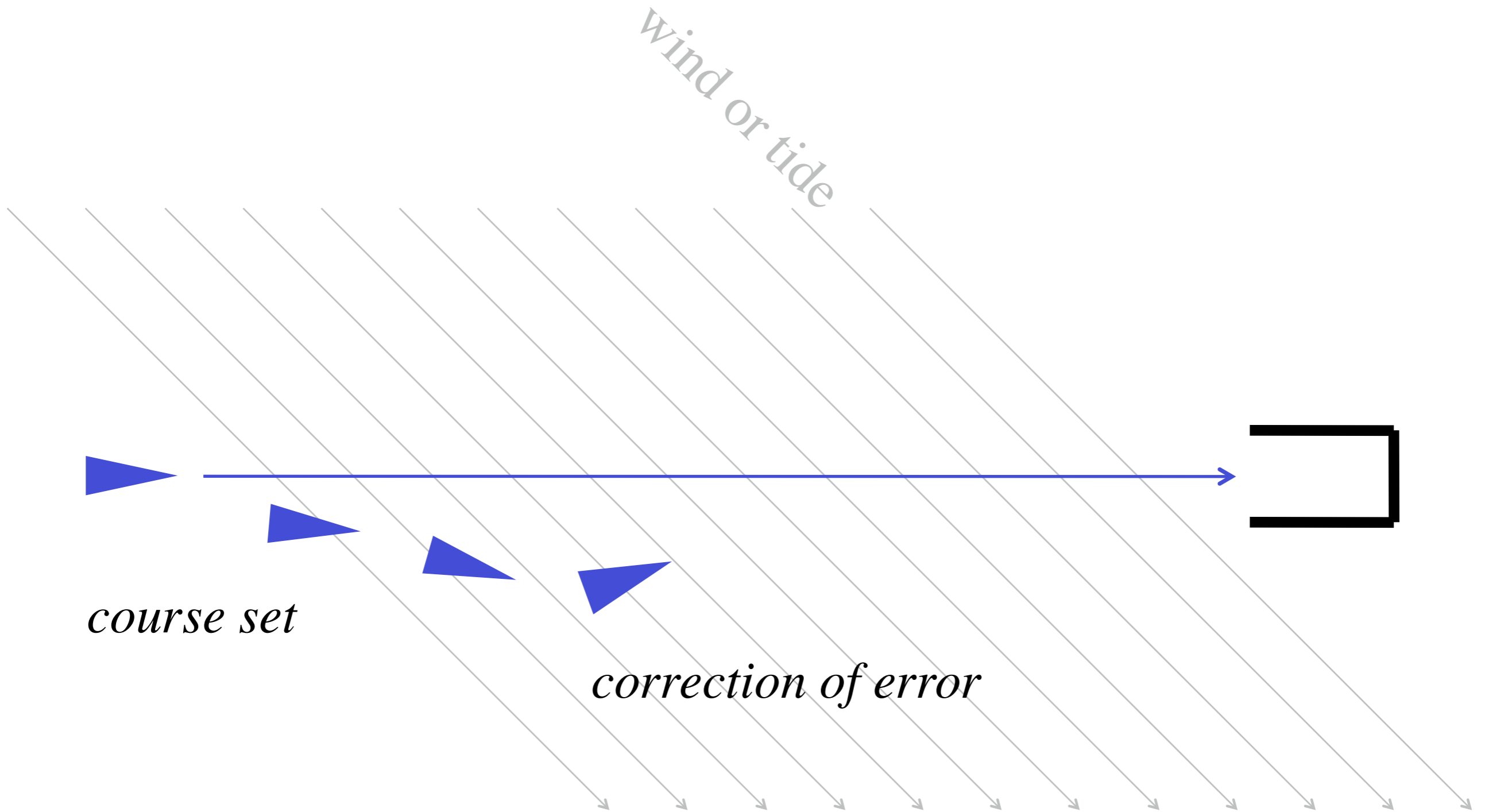
the science of steering—heading toward a goal



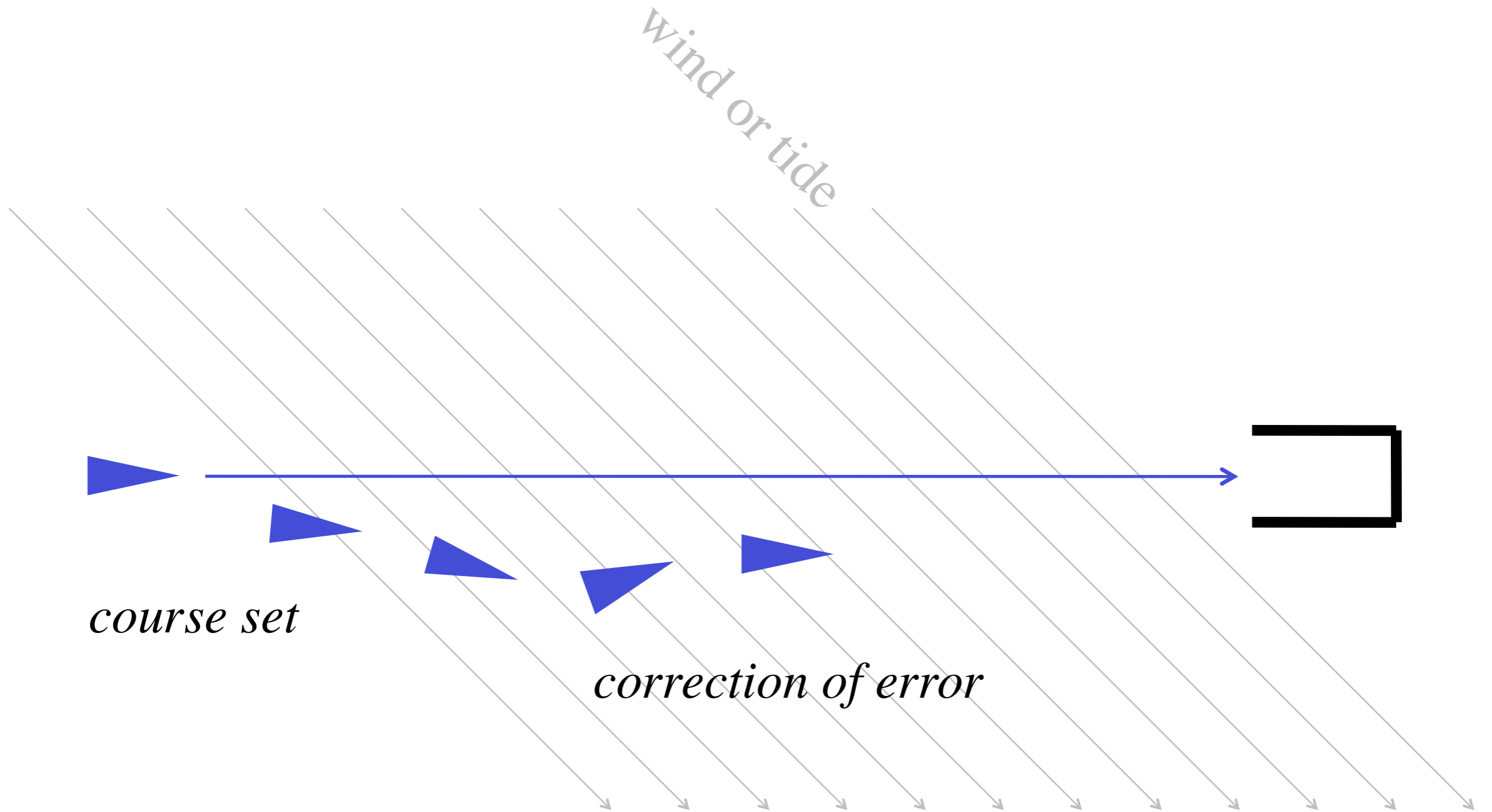
the science of steering—getting blown off course



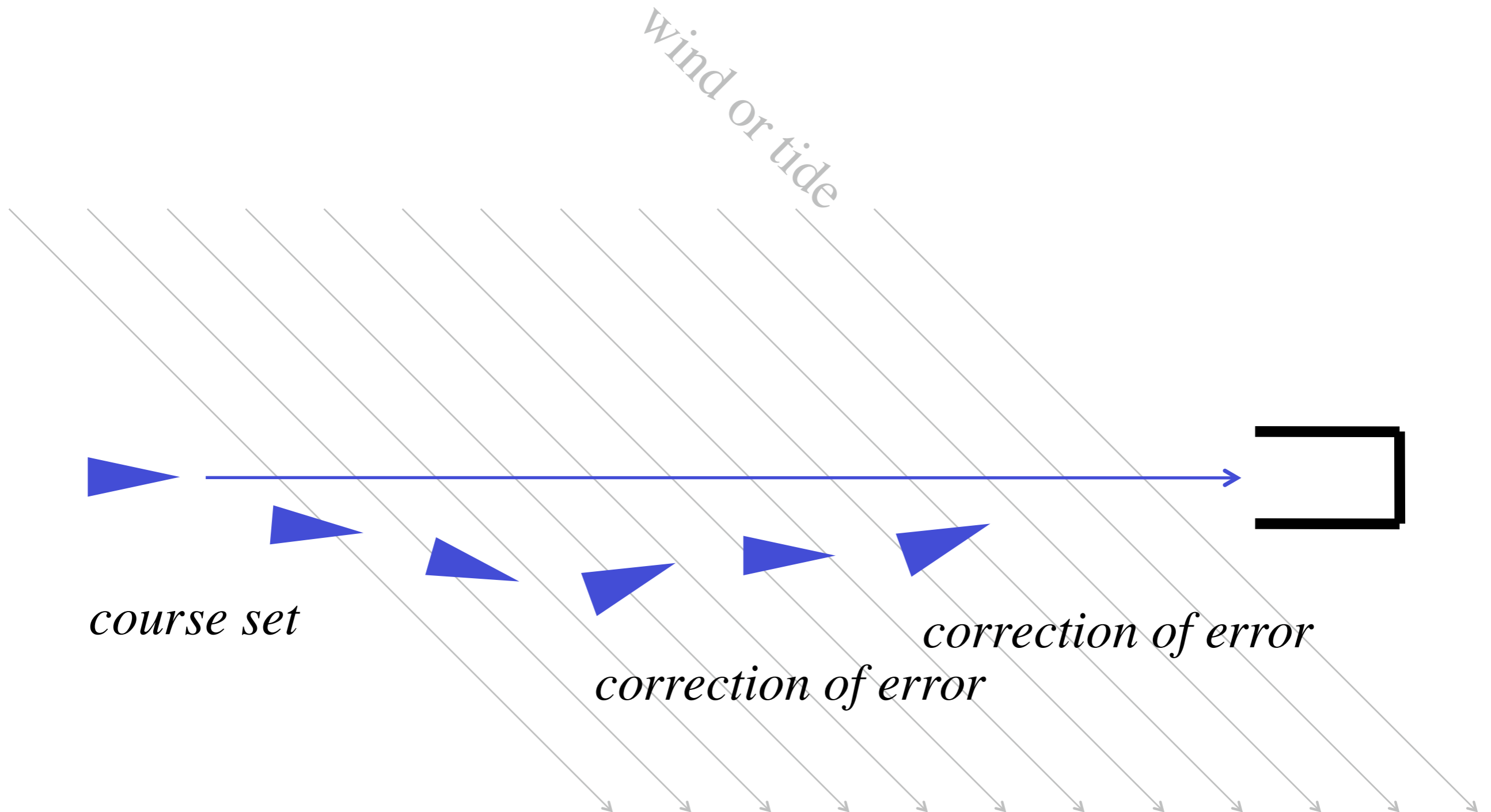
the science of steering—course correcting



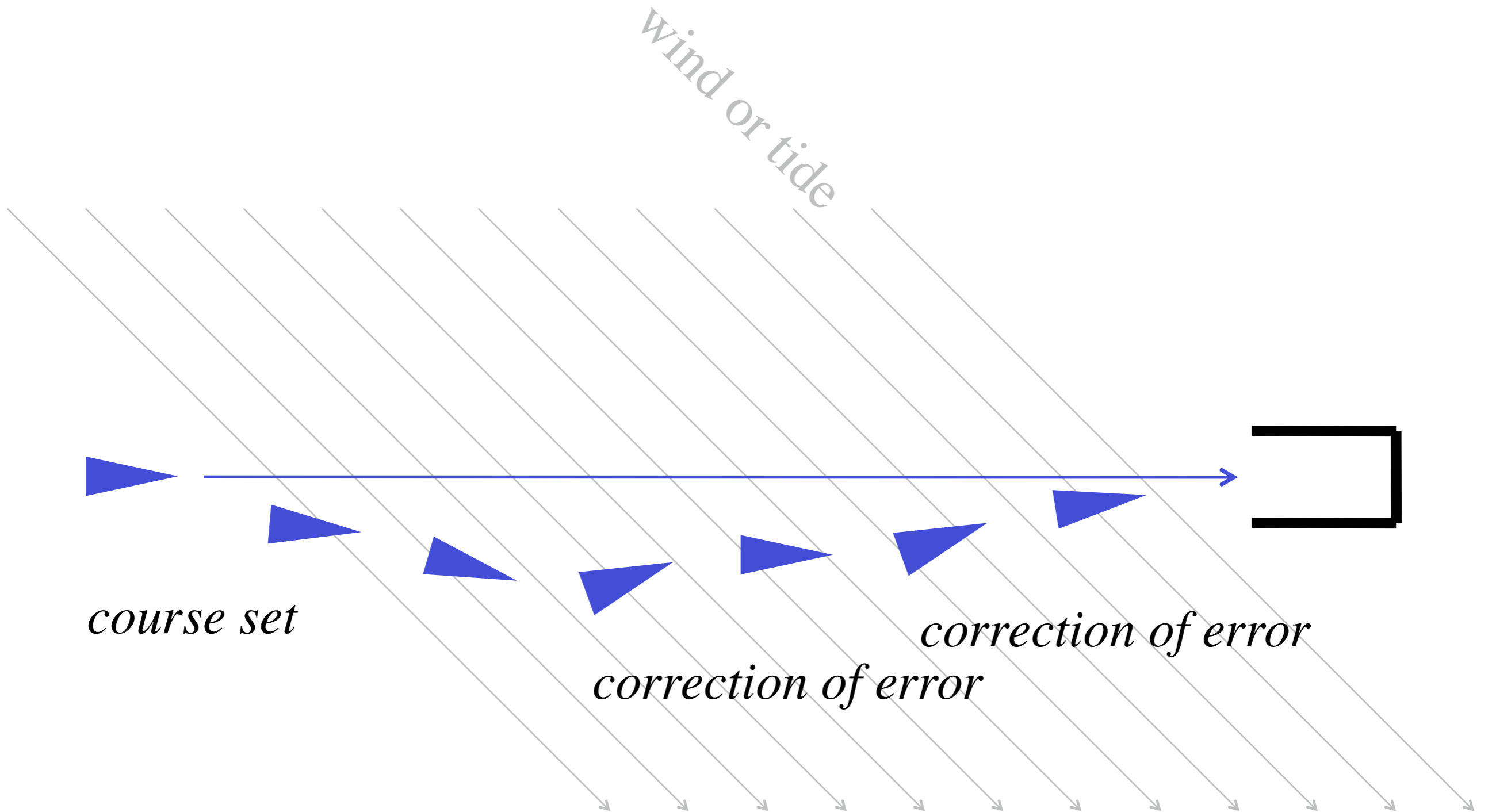
the science of steering



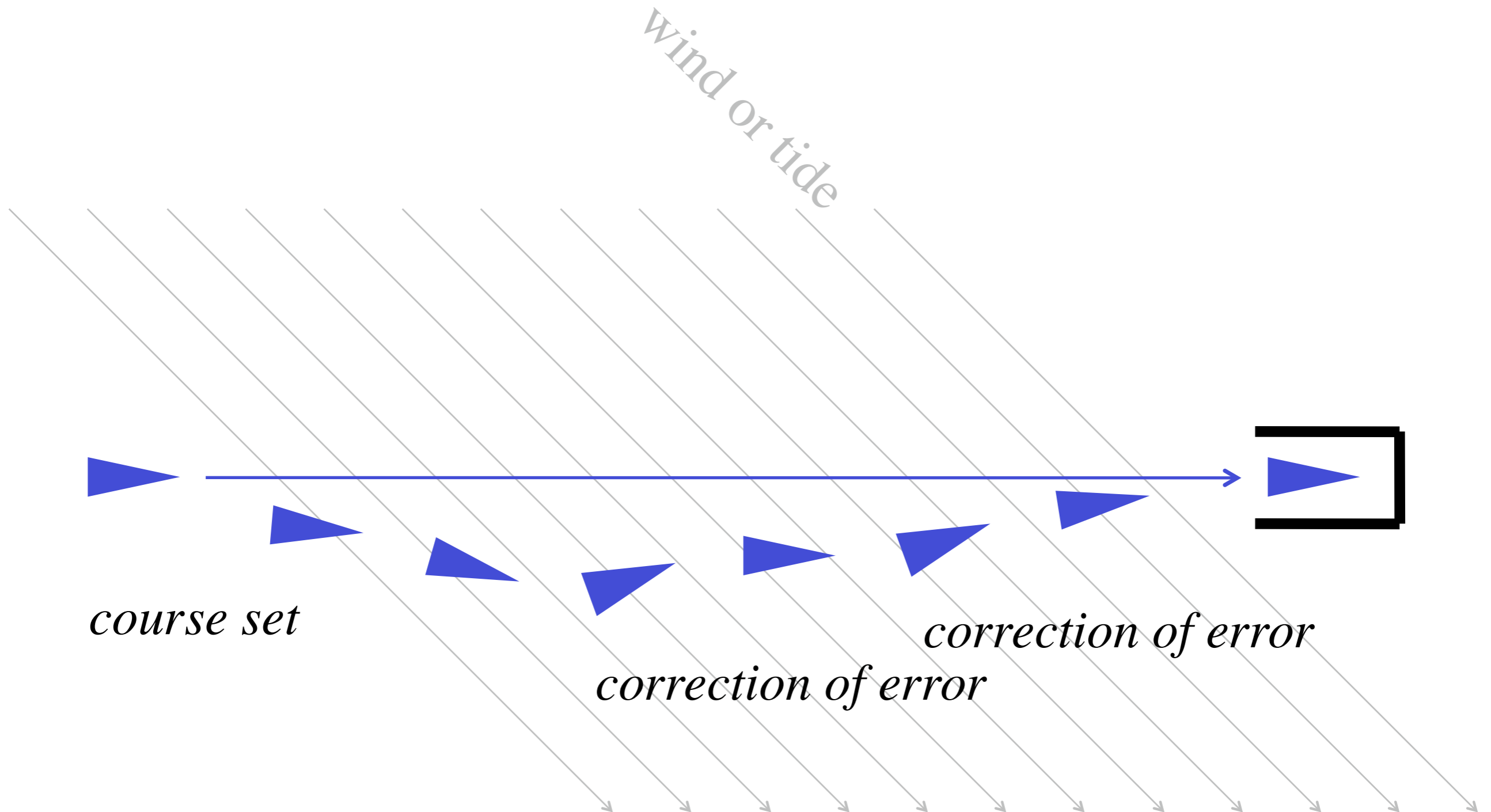
the science of steering—constantly using feedback



the science of steering



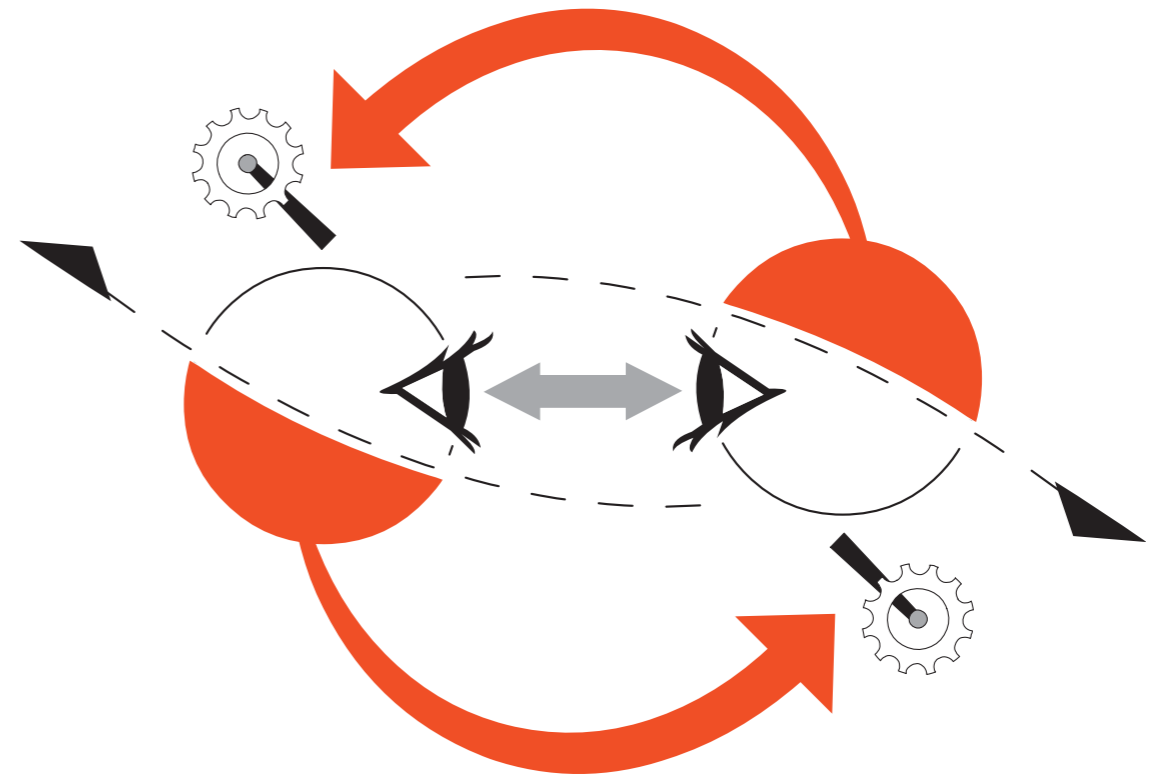
the science of steering—achieving the goal



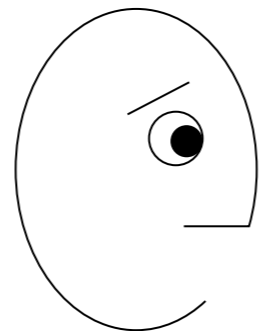
how do we design for conversation?

by applying cybernetics of conversation

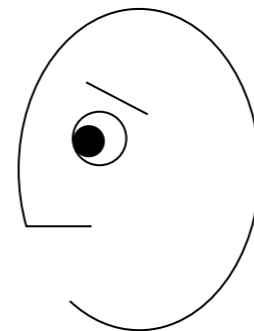
- ▶ what are the goals?
- ▶ how do we measure if we're on course?
- ▶ what controls do we have?



what is conversation?

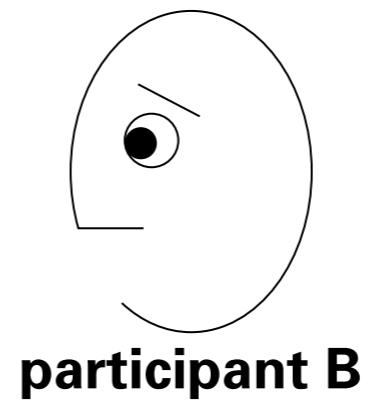
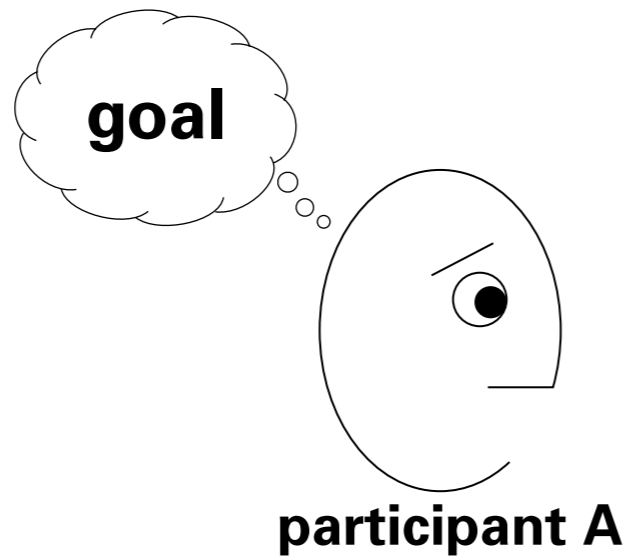


participant A

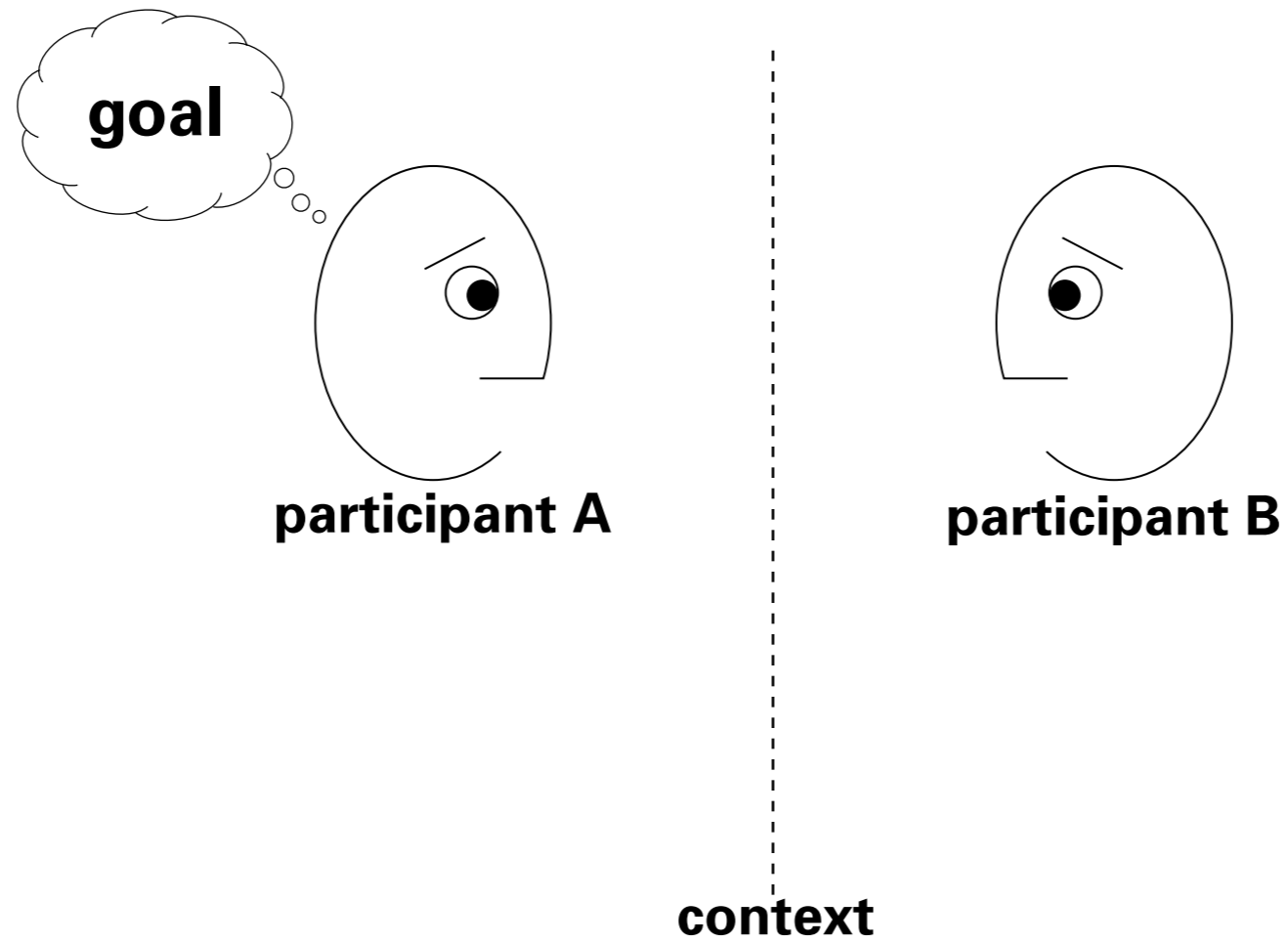


participant B

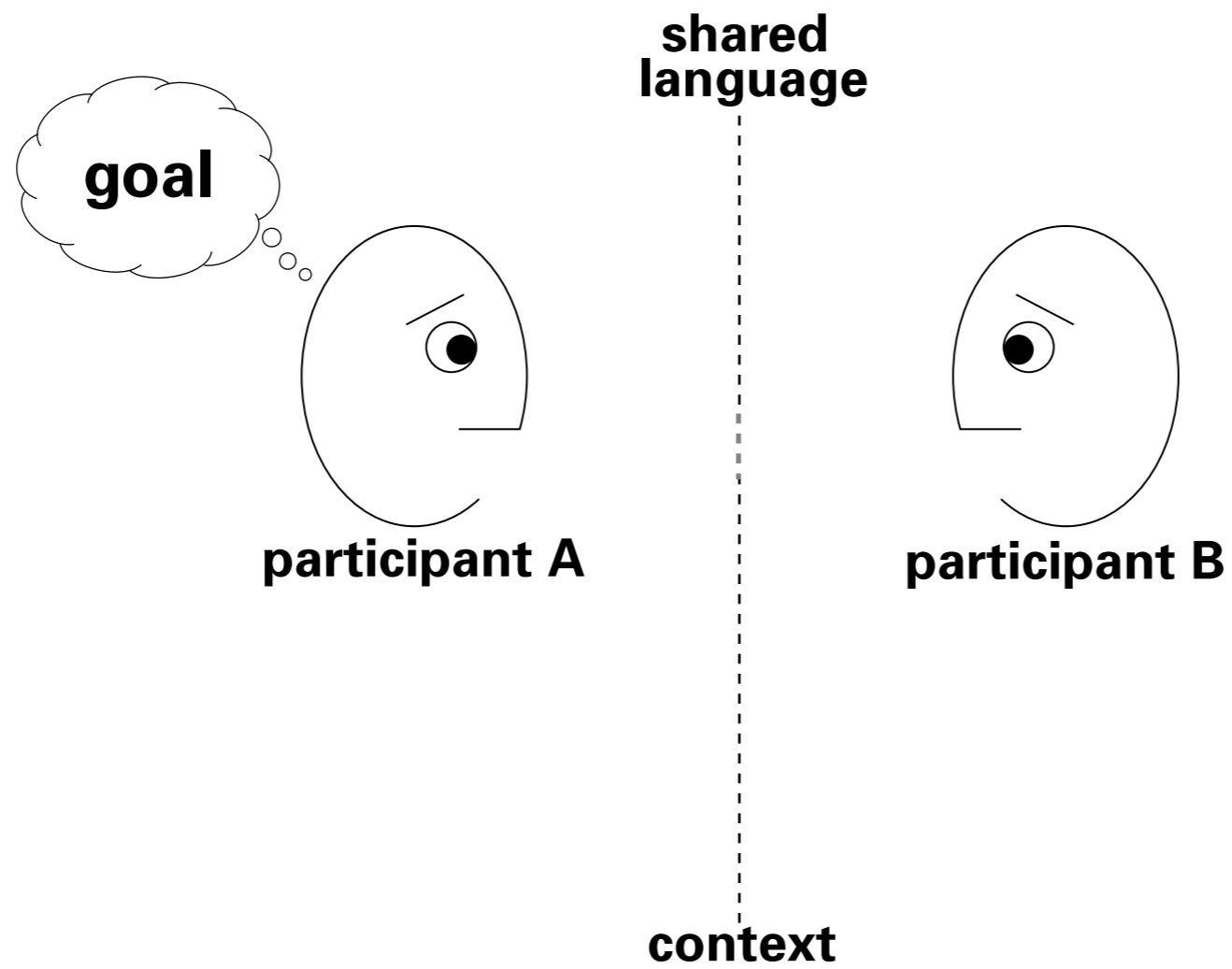
a participant has a goal



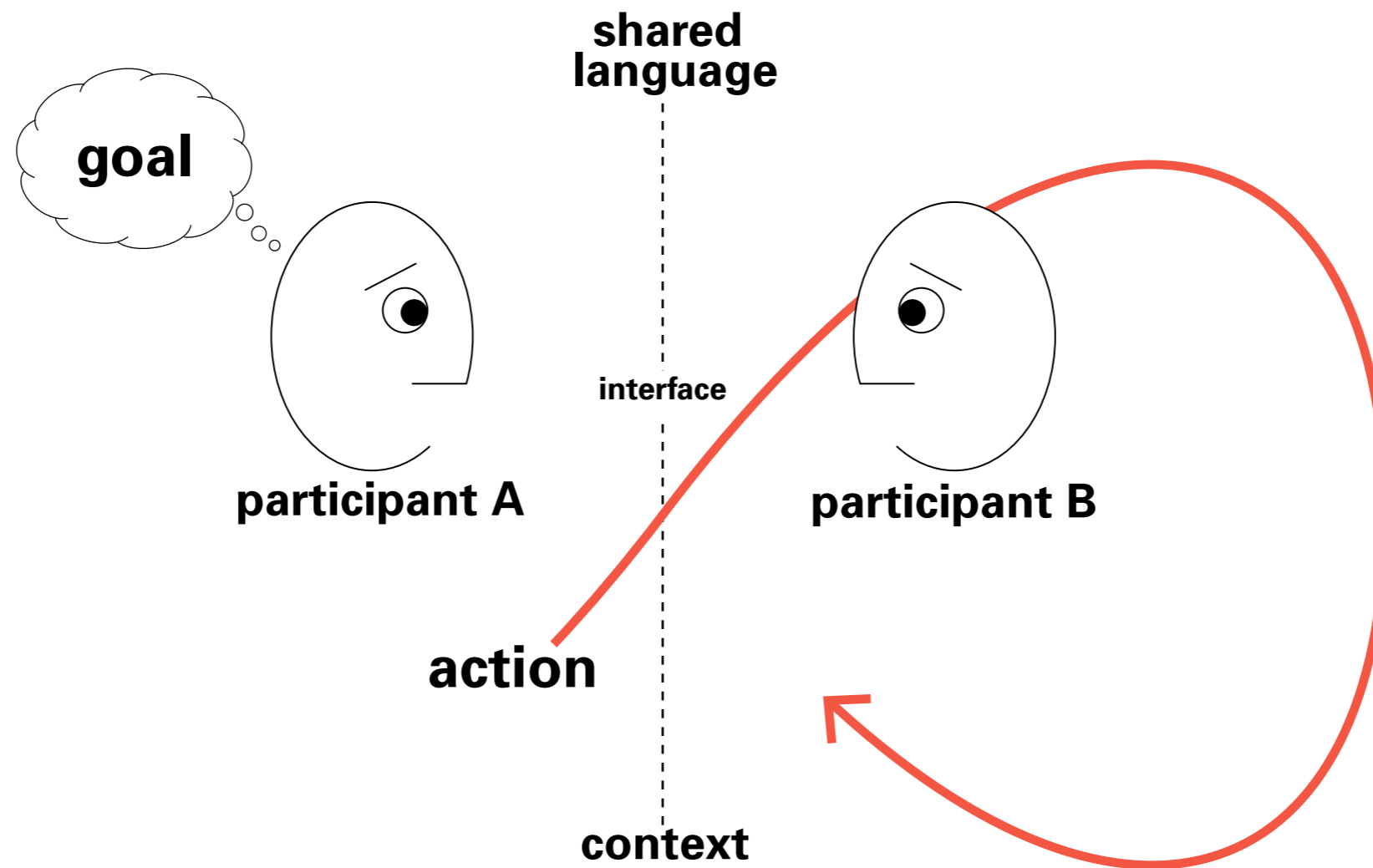
chooses a context



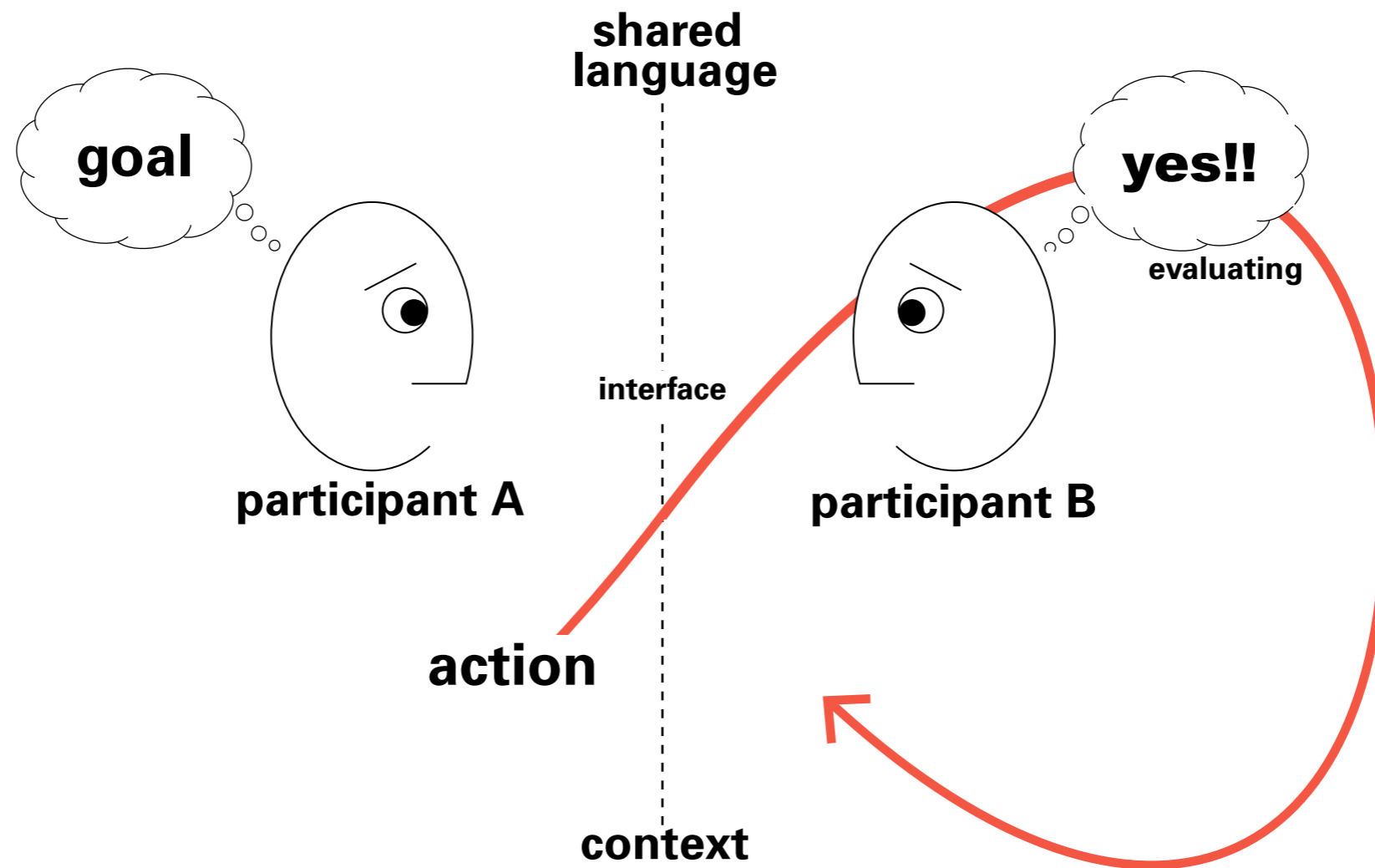
chooses a language



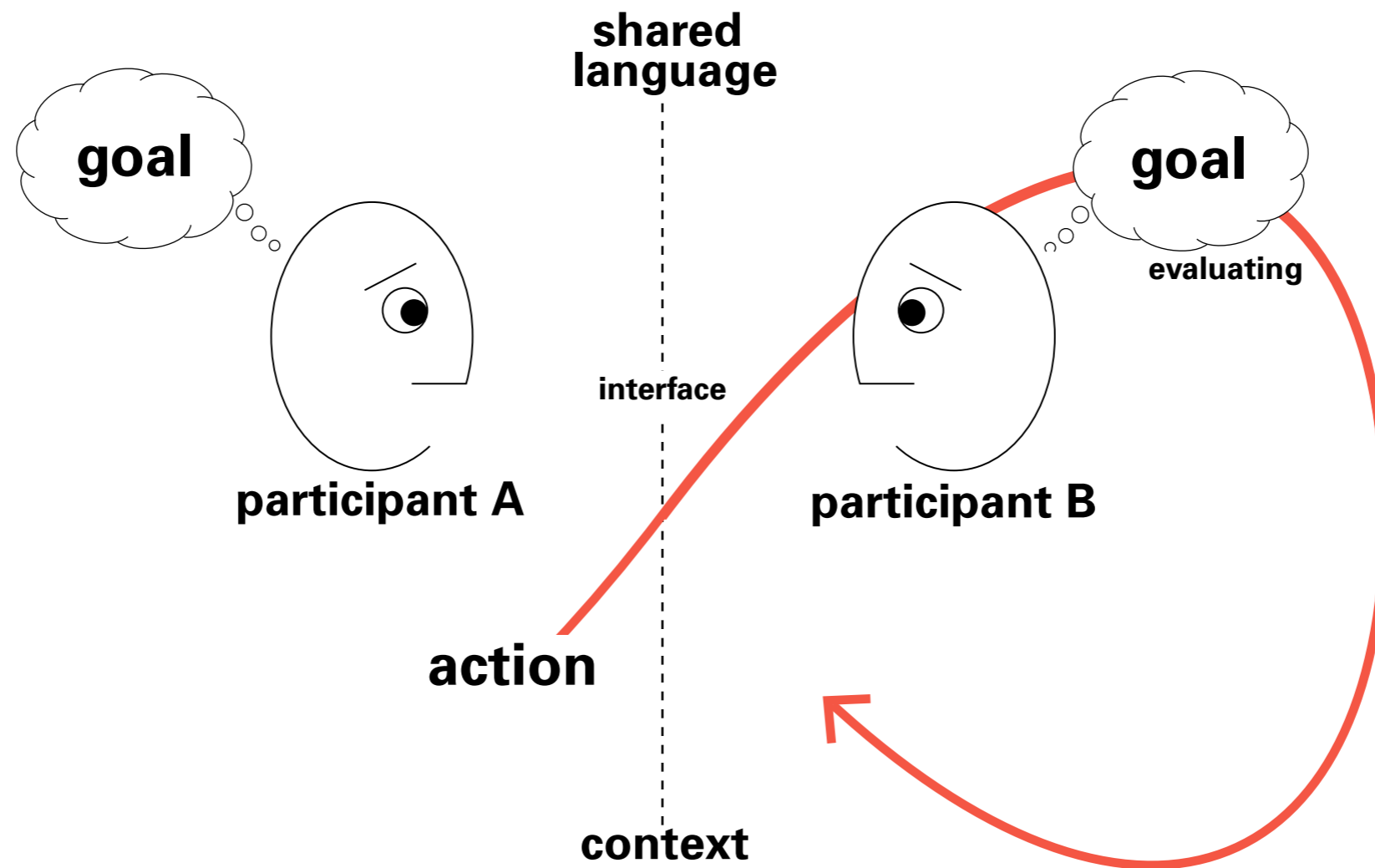
begins an exchange



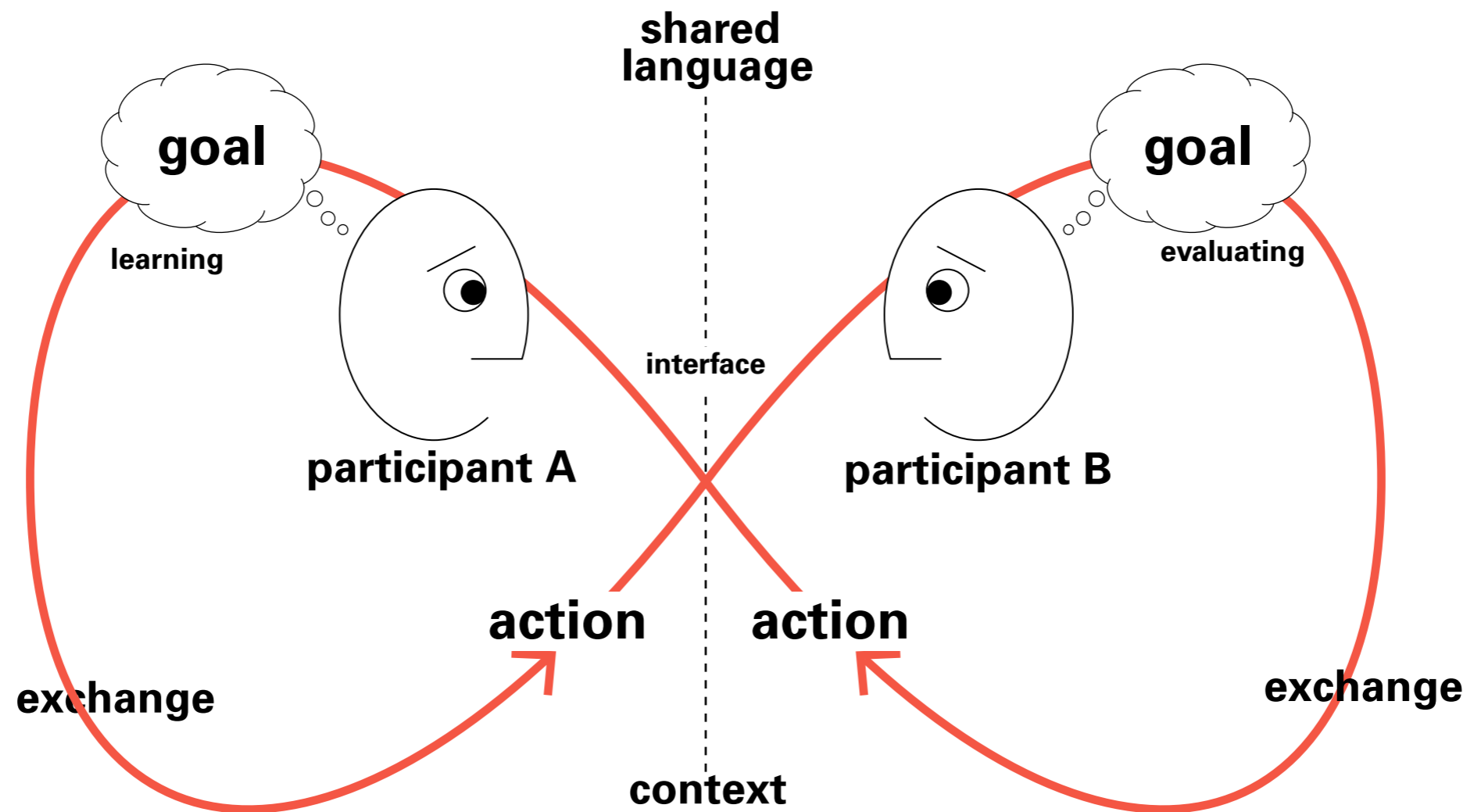
evokes a reaction...



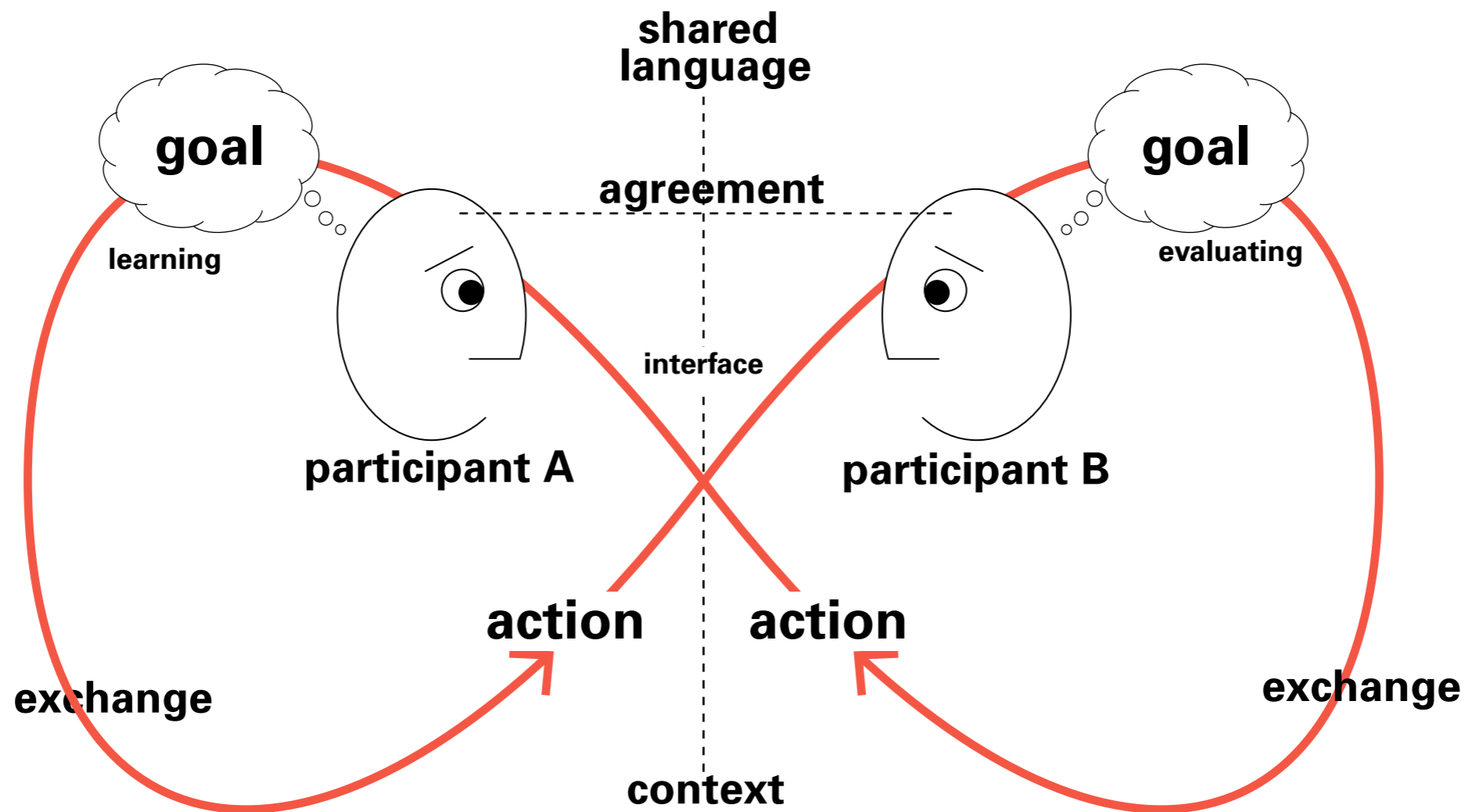
evokes a reaction...



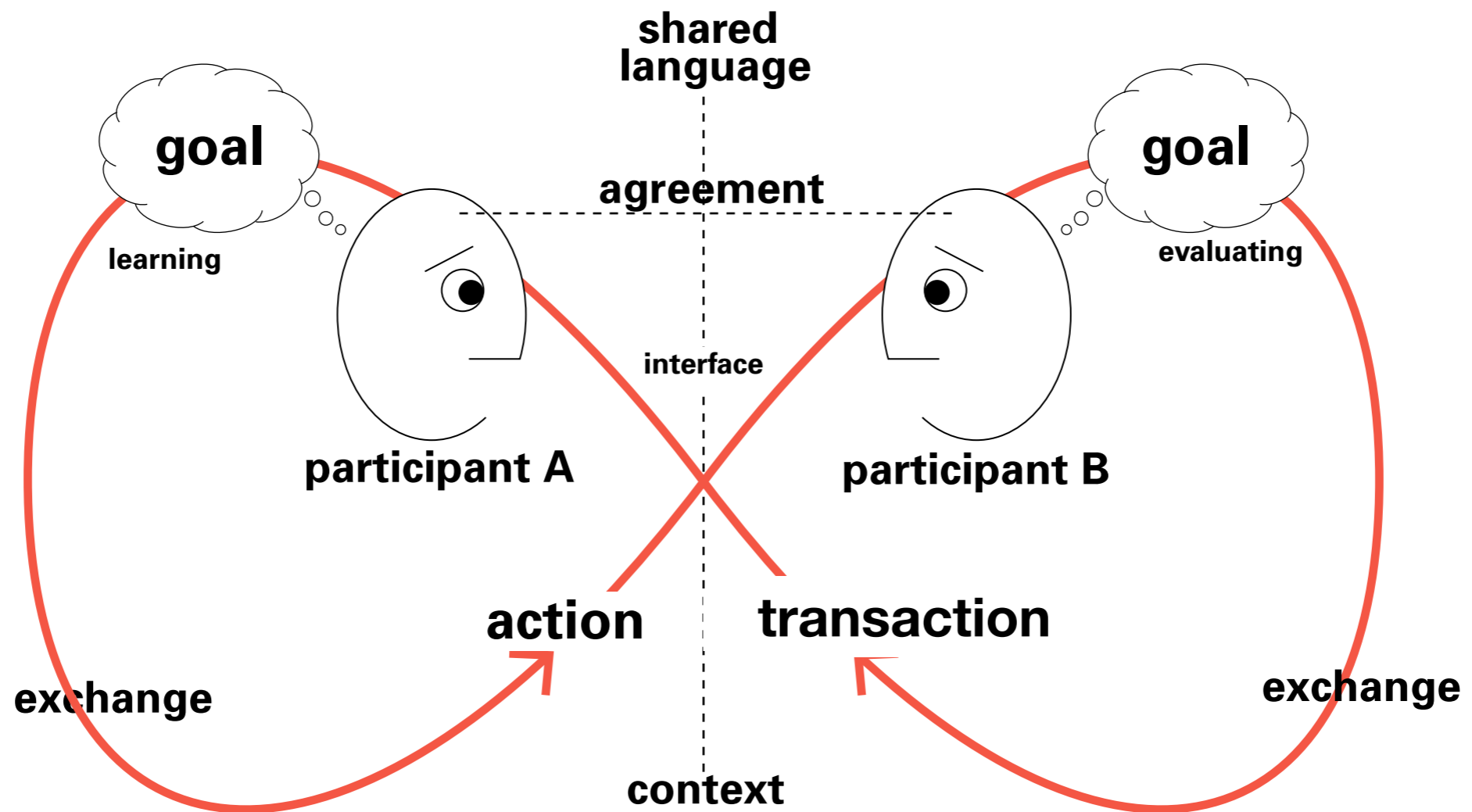
...that evokes a reaction



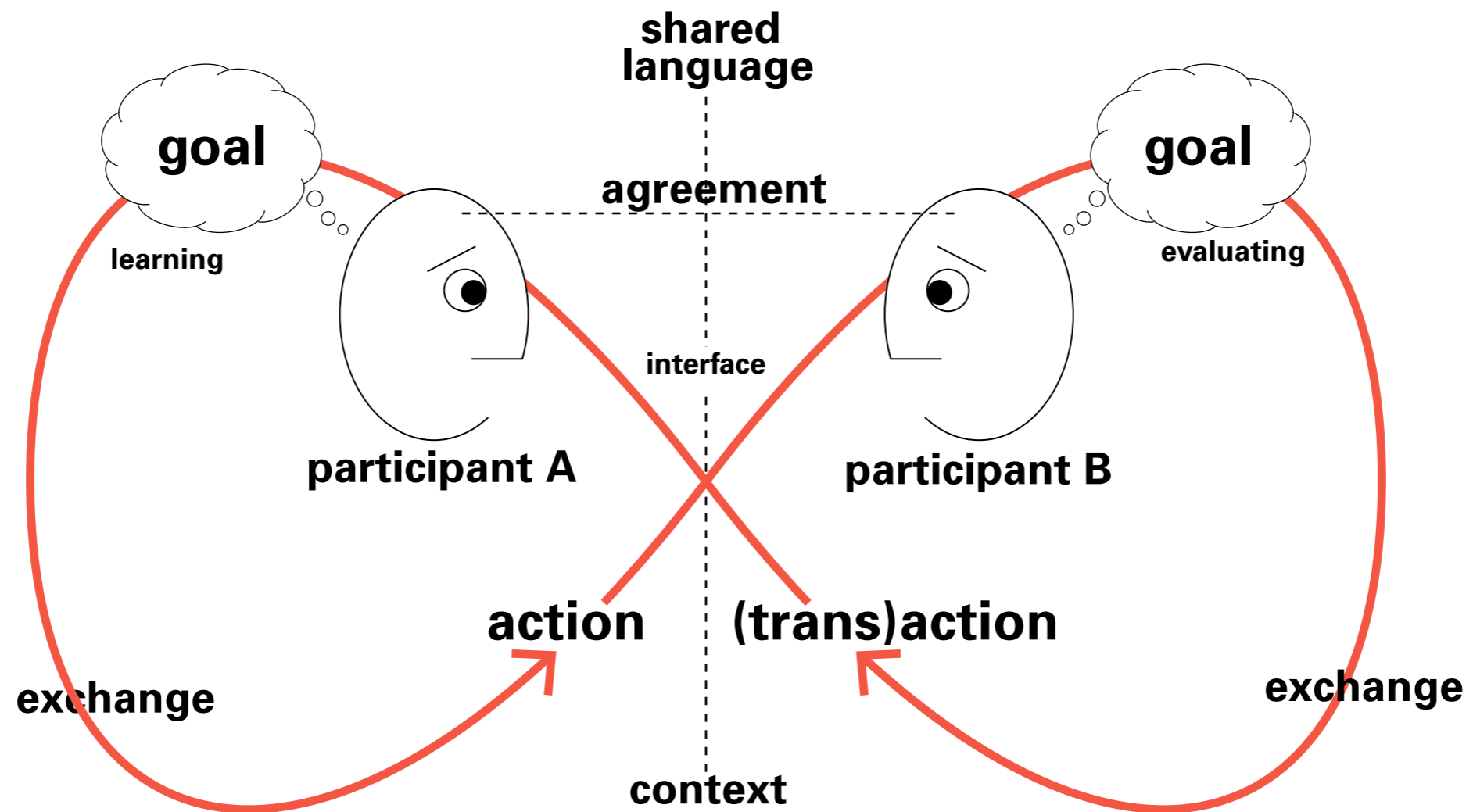
agreement may be reached



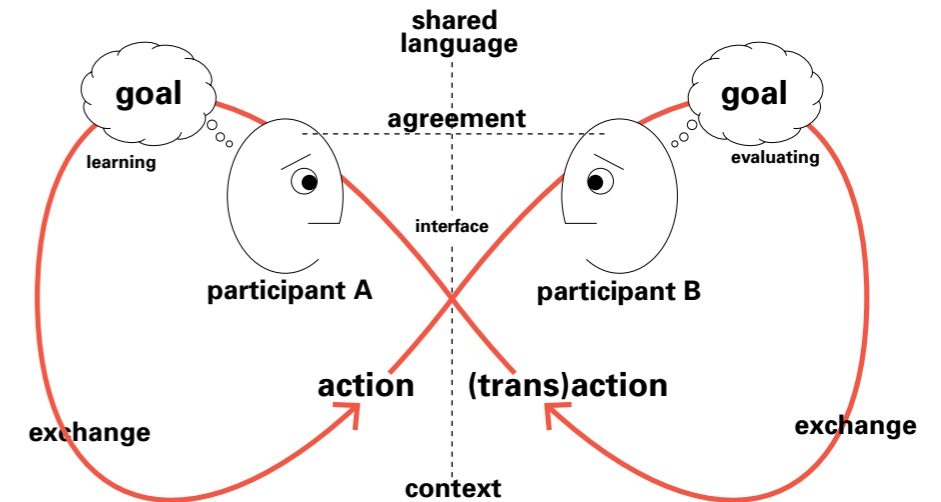
a transaction may occur



how does conversation help us design?



how does conversation help us design?



conversation = framework for designing systems and services

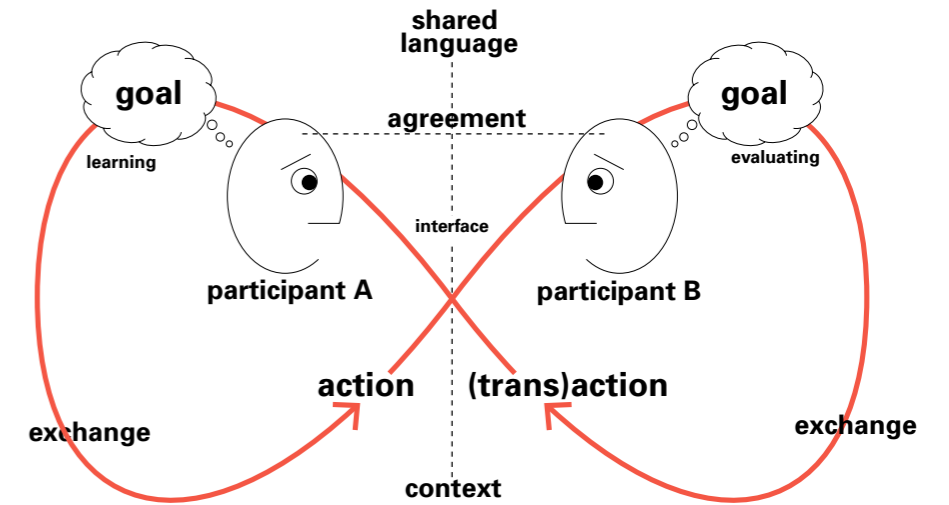
- ▶ context
- ▶ language
- ▶ exchange
- ▶ agreement
- ▶ transaction

context — language — exchange — agreement — transaction

cleat = conversational traction



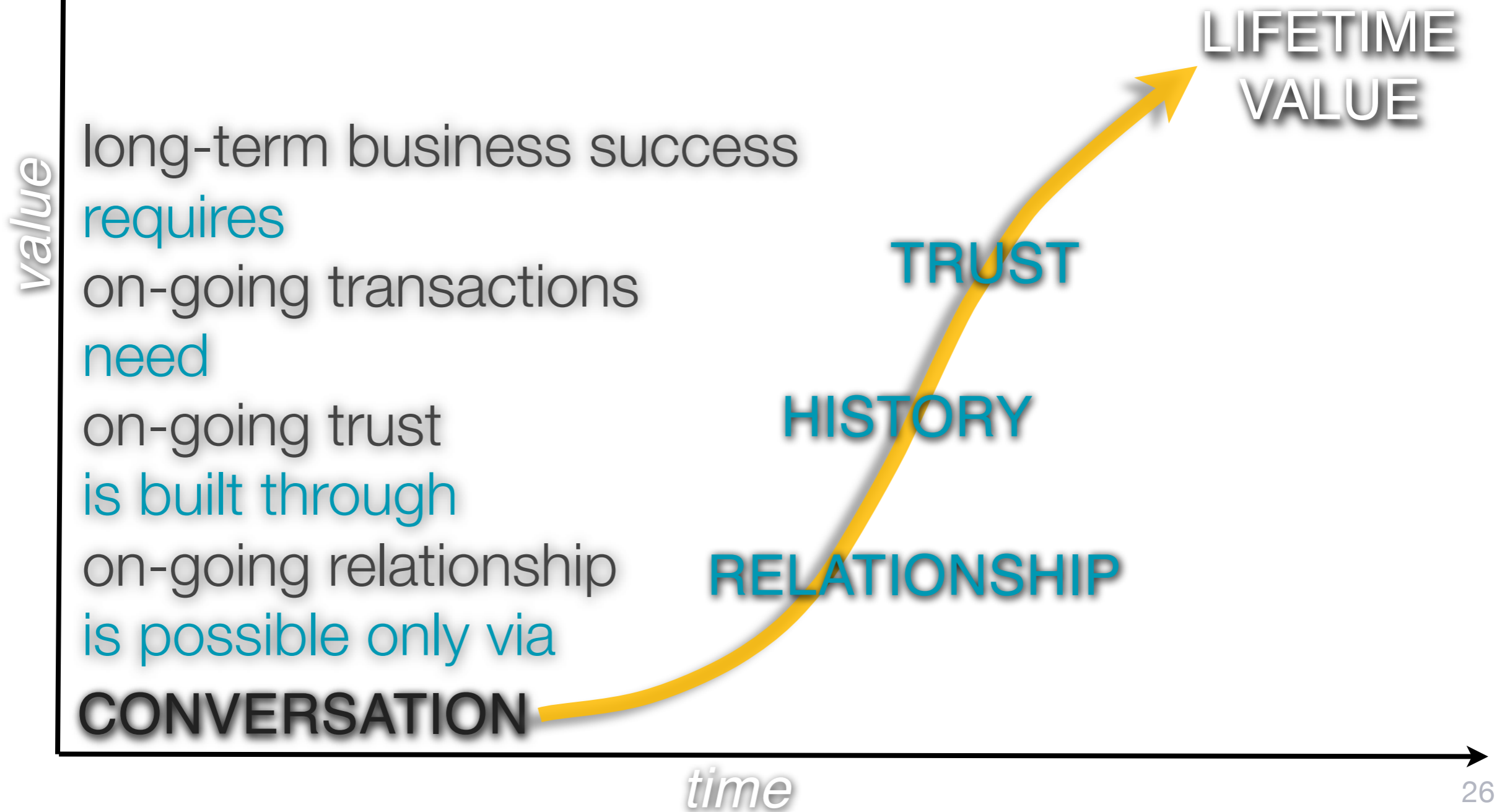
how does conversation help us design?



conversation = framework for designing systems and services

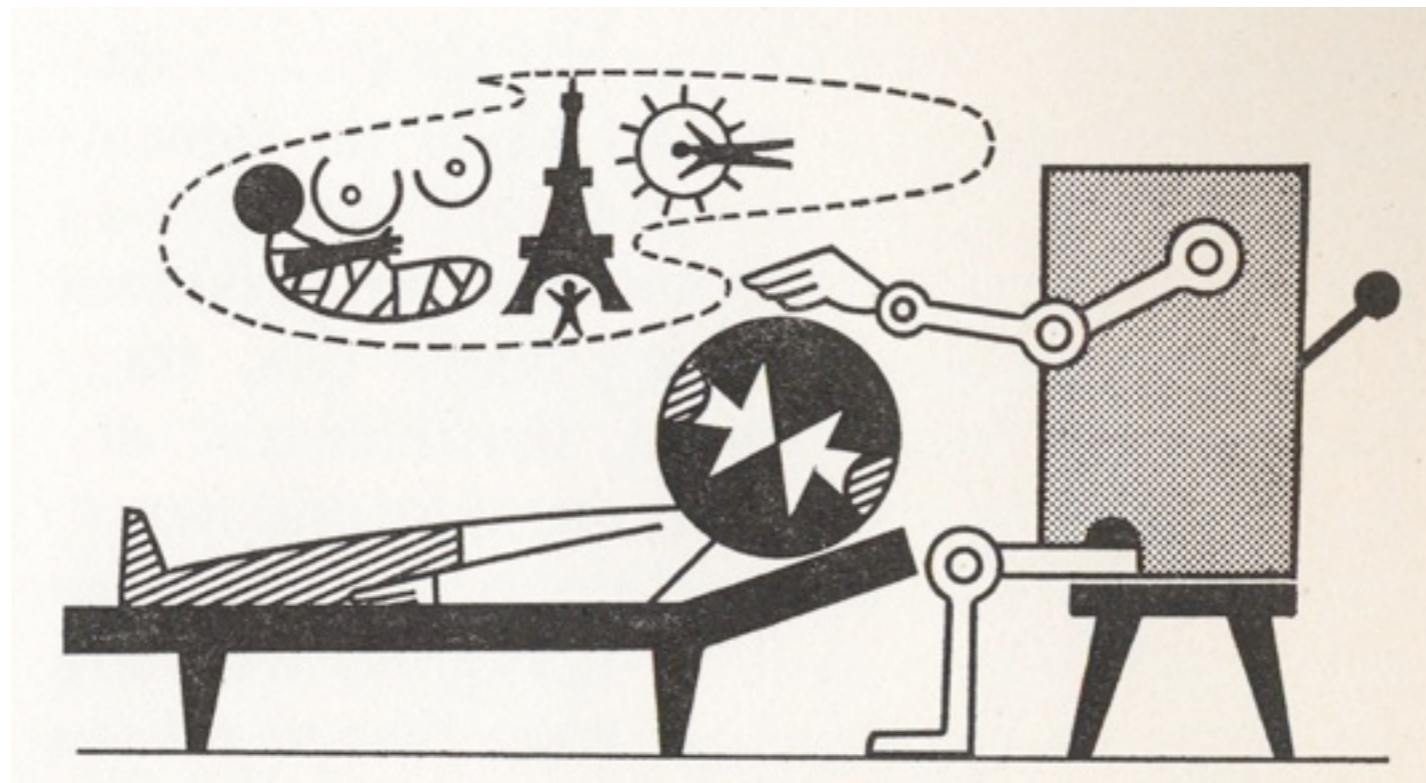
conversation = basis for long-term relationships

conversation = infrastructure of commerce



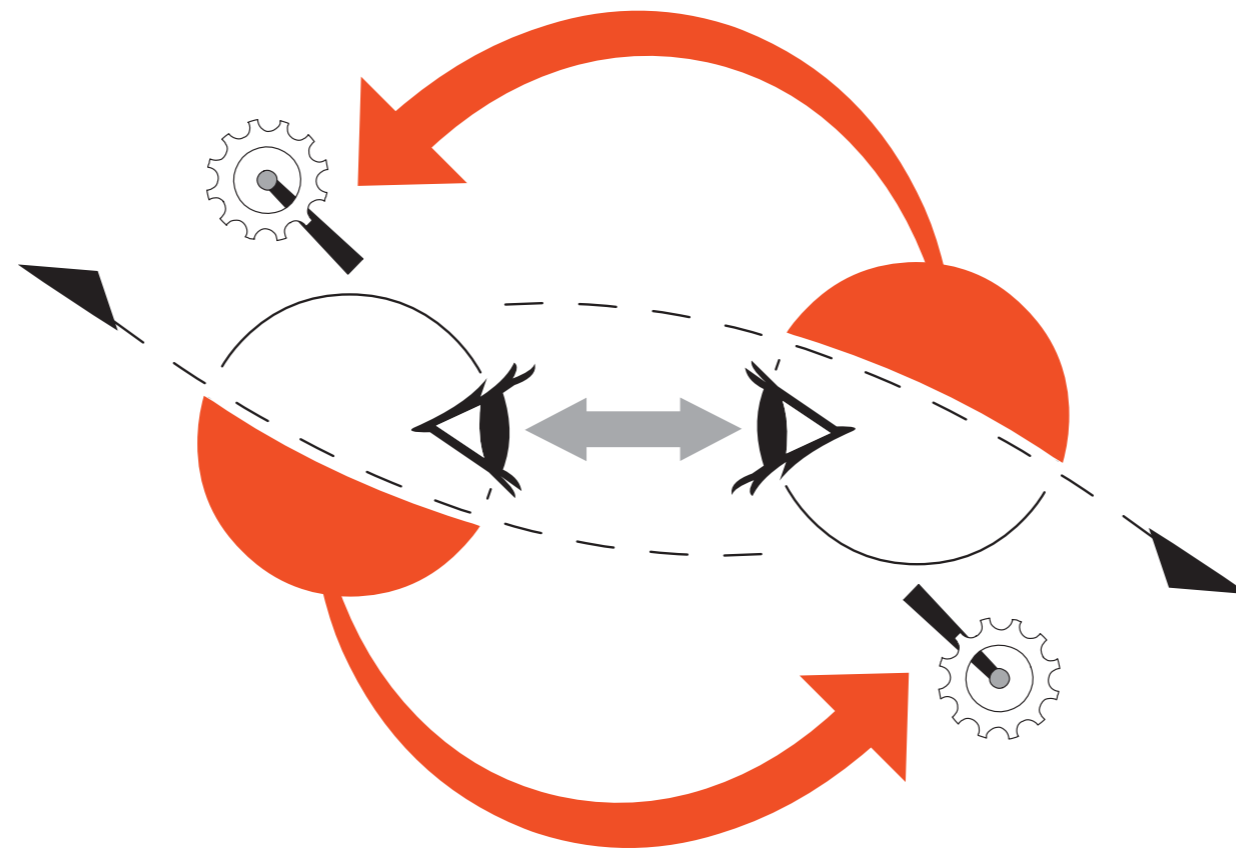
we can rely on computed inferences

ANALYSIS OF USER BEHAVIORS

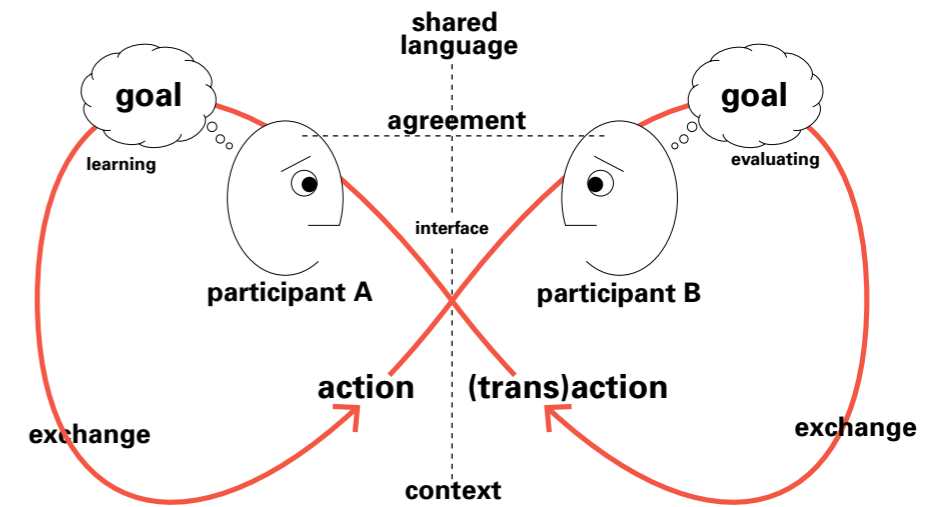


...or evolve with new frameworks

CONVERSATIONAL ENGAGEMENT



how does this help?

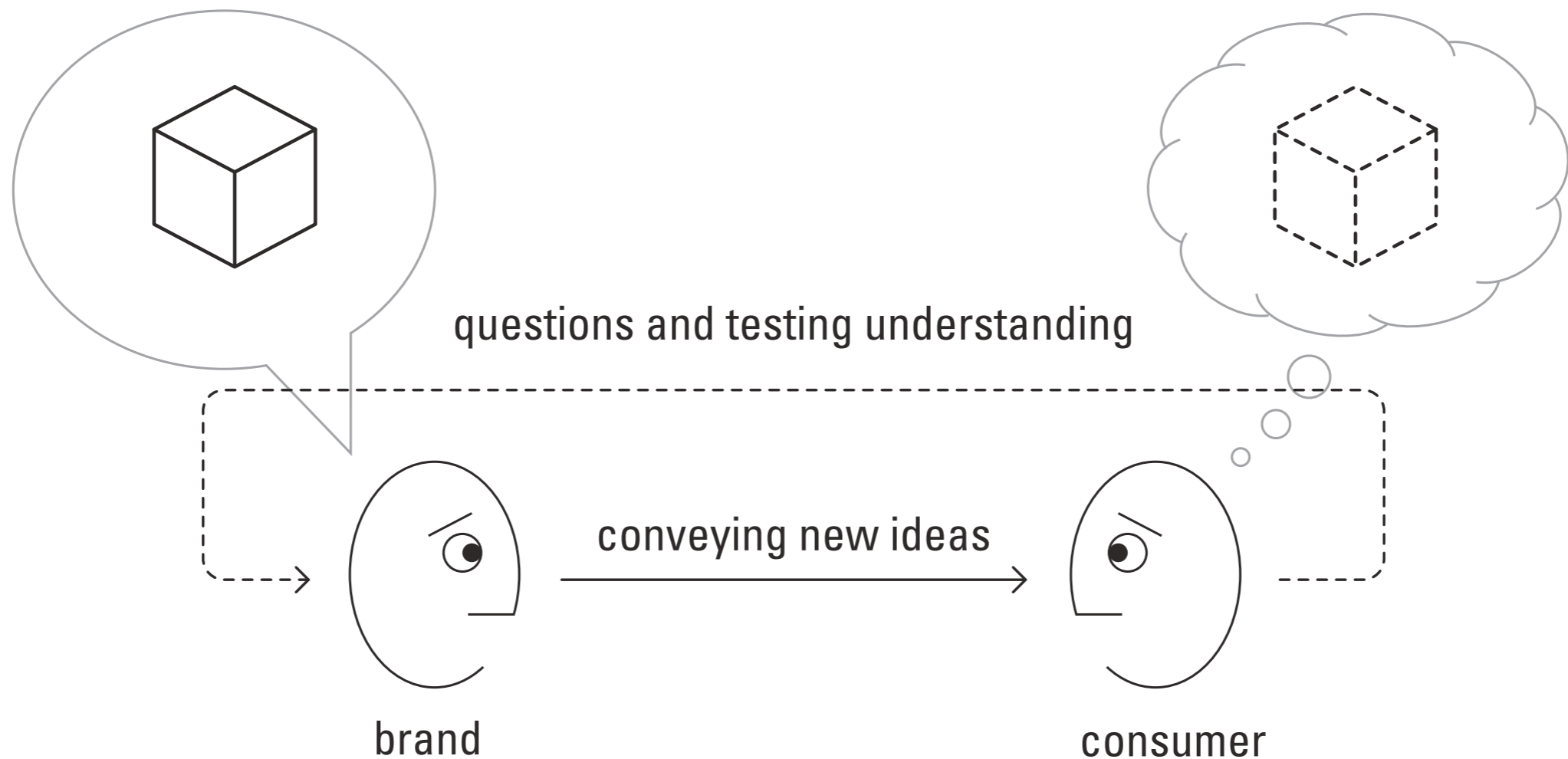


conversation = framework for designing systems and services

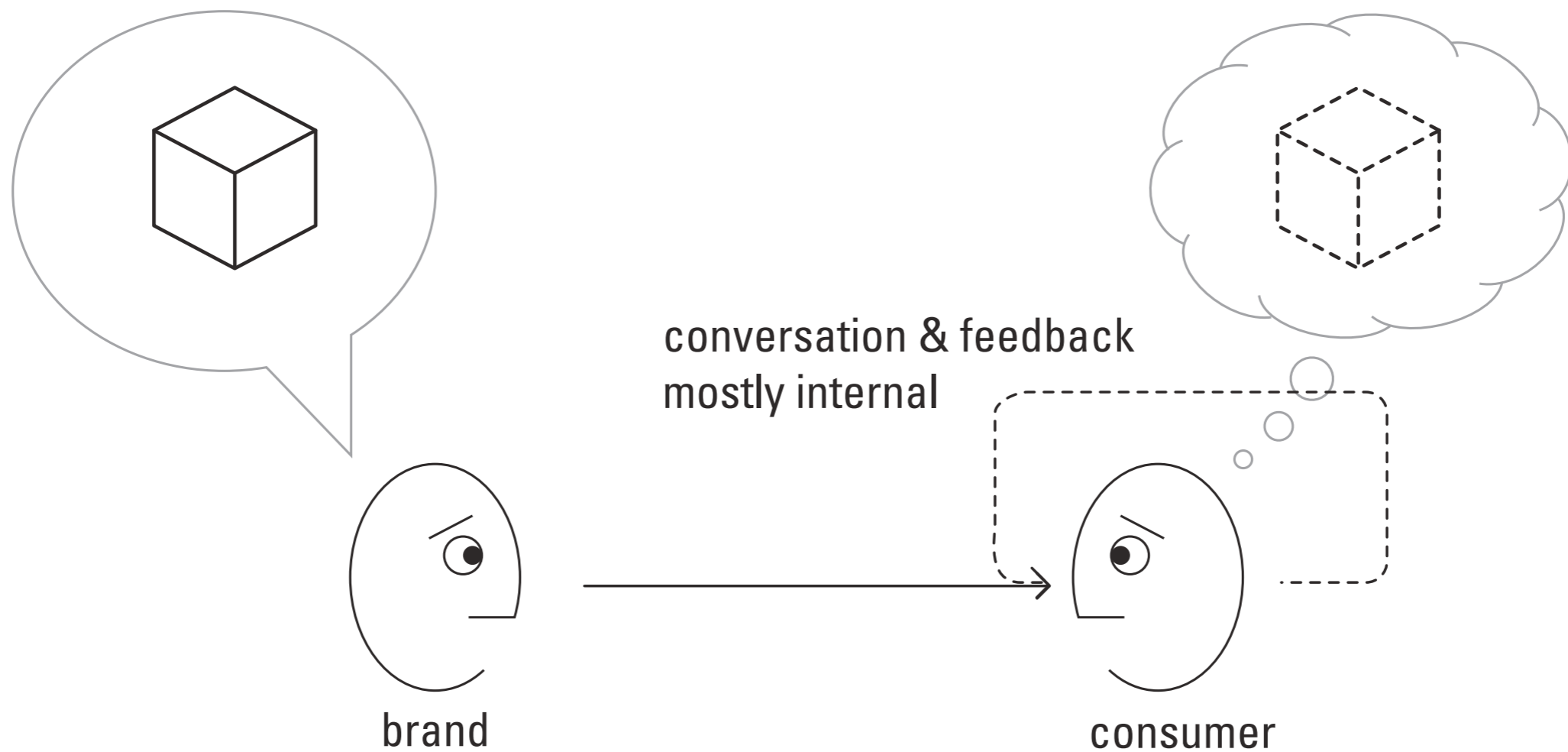
conversation = basis for long-term relationships

conversation = best means to persuade, to change beliefs

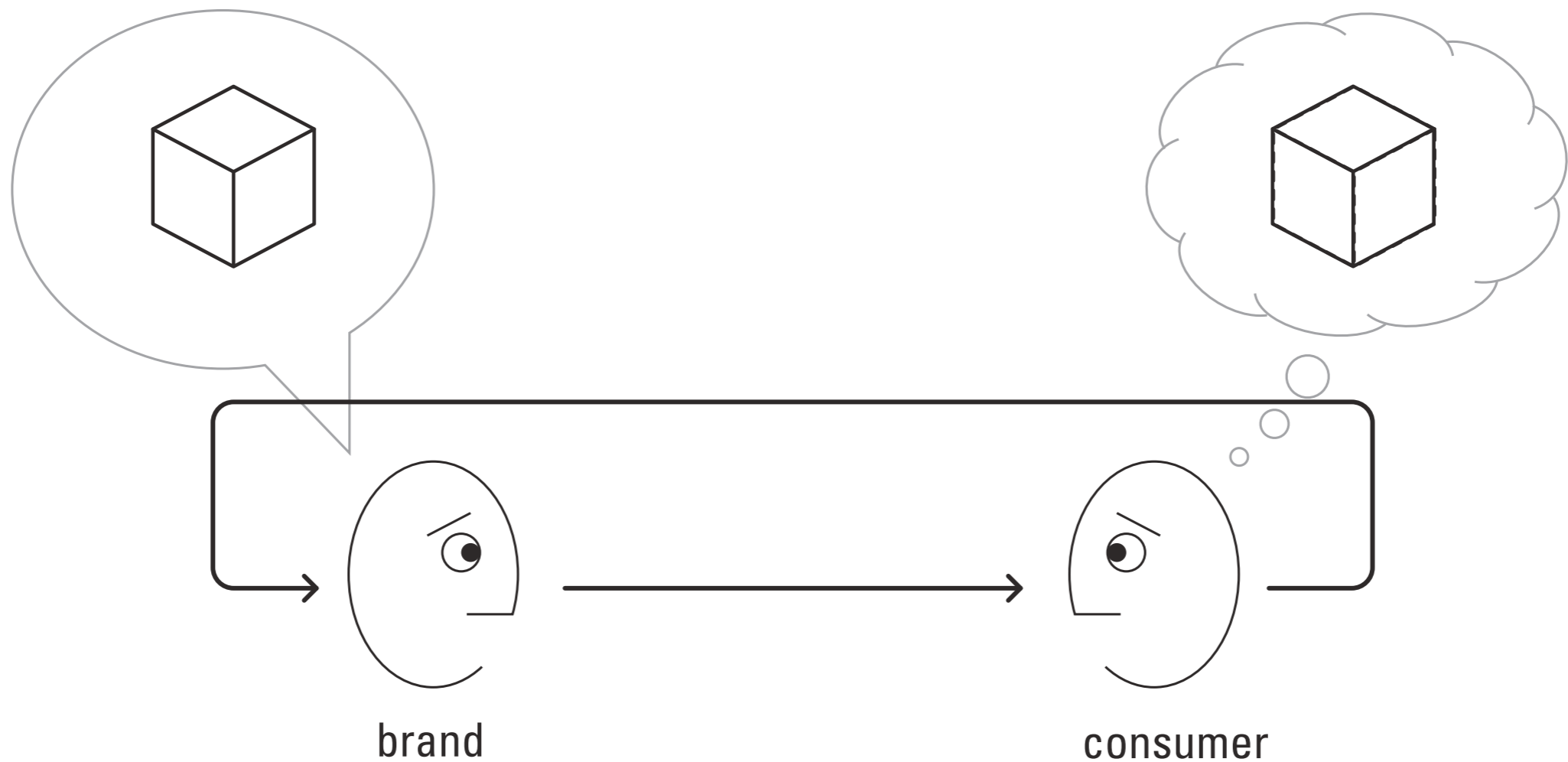
changing beliefs requires conversation



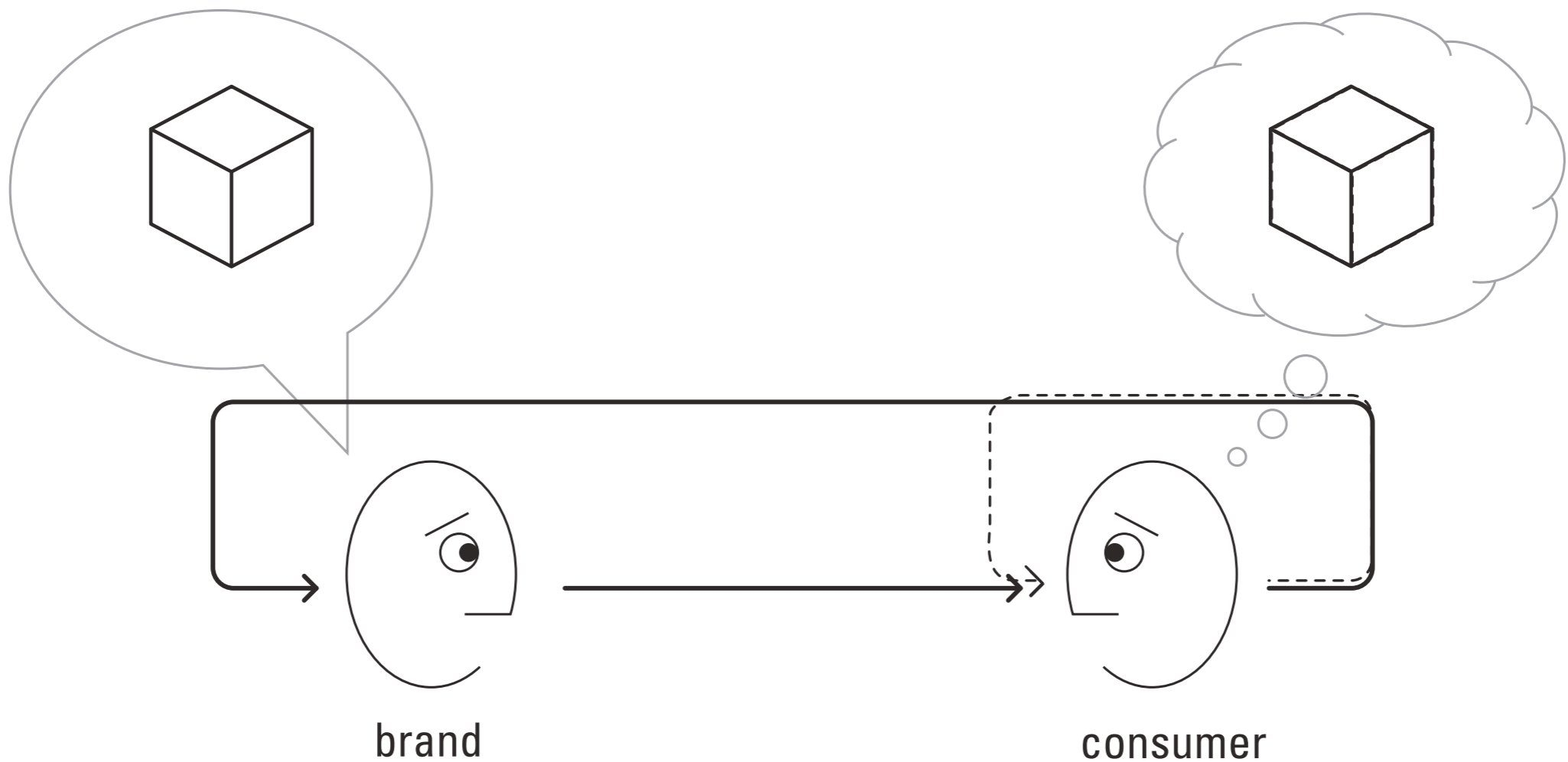
a lot of conversation is internal



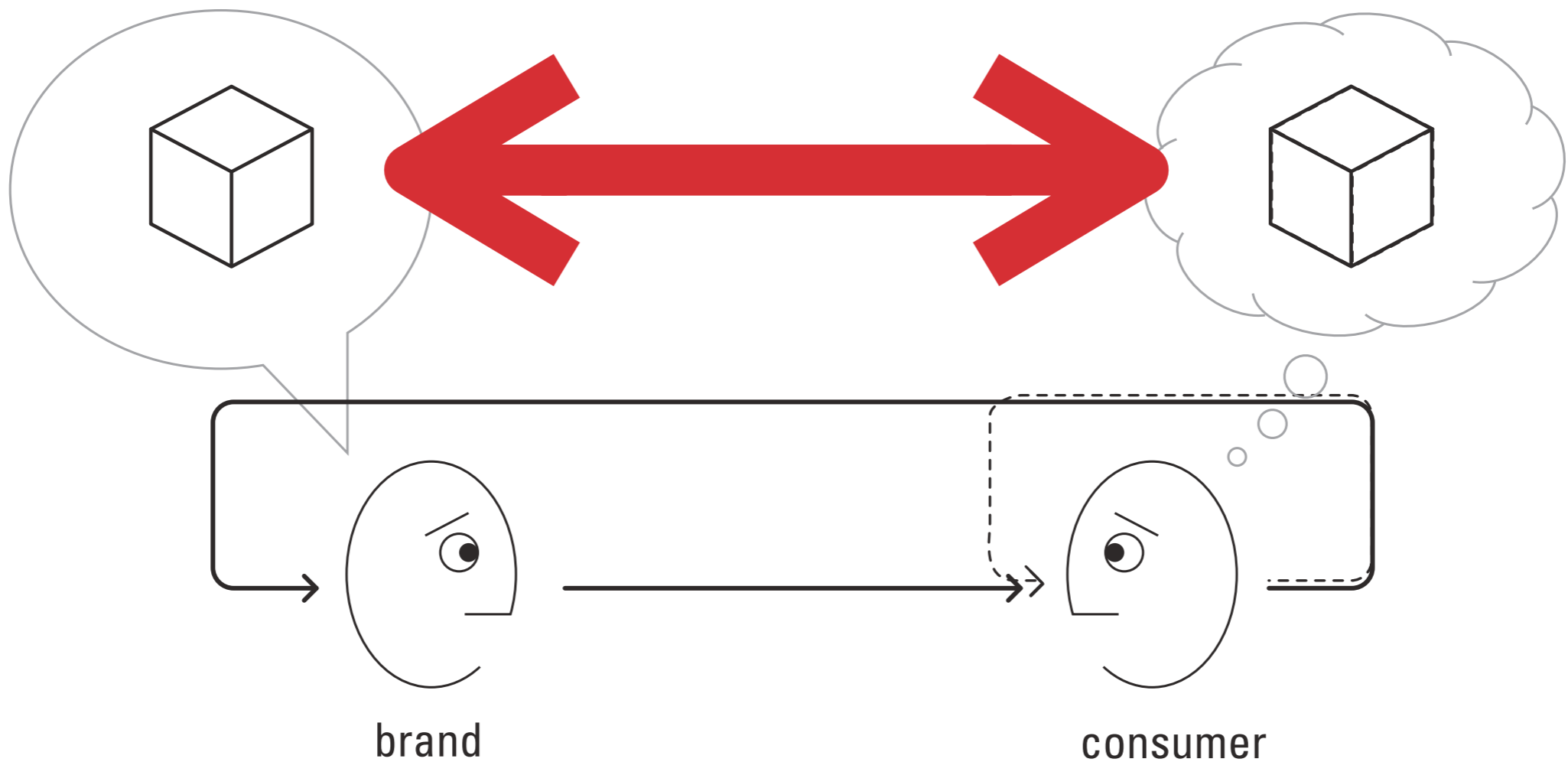
p2p conversation is more influential



p2p + internal conversations are needed to ensure beliefs are shared



p2p + internal conversations are needed to ensure beliefs are shared



putting conversation to work

	design for conversation
context	
language	
exchange	
agreement	
transaction	

Invest in a better understanding of conversation

- ▶ **Review past projects and re-cast them as conversations—
How could design outcomes be improved?**
- ▶ **Look at new technologies or techniques in terms of conversation—
Do they help generate more effective conversations?**
- ▶ **When developing new projects, do models of conversation help
in choosing technologies or techniques?**
- ▶ **Can we design for conversations that directly improve trust, and
therefore create stronger communities or greater lifetime customer value?**

investigate trends, tools, and technologies that will change online conversations in 3 to 5 years

- ▶ **personal journeys—how will tech exposure and physical age matter?**
- ▶ **social computing—how will conversational technology matter?**
- ▶ **portable and secure identity—how will privacy matter?**
- ▶ **mobility+sensor networks—how will context-awareness matter?**

prototype the conversations you want to have

- ▶ **for all roles—users + clients, clients + designers, designers + ...**
- ▶ **across boundaries of current roles—all are participants**
- ▶ **across organizational boundaries—partners, competitors, communities**
- ▶ **across media—f2f and mediated, real-time and asynchronous**

New Revolution?

ROLE OF MACHINES	Industrial Revolution
extend + enhance ...	muscles
wealth creation by lowering cost of ...	doing physical work
	1750—1850

New Revolution?

ROLE OF MACHINES	Industrial Revolution	Computer Revolution
extend + enhance ...	muscles	nervous system
wealth creation by lowering cost of ...	doing physical work	lowering uncertainty
	1750—1850	1955—1995

New Revolution?

ROLE OF MACHINES	Industrial Revolution	Computer Revolution	Conversation Revolution
extend + enhance ...	muscles	nervous system	collaboration
wealth creation by lowering cost of ...	doing physical work	lowering uncertainty	creating new knowledge
	1750—1850	1955—1995	2009—??

epilogue

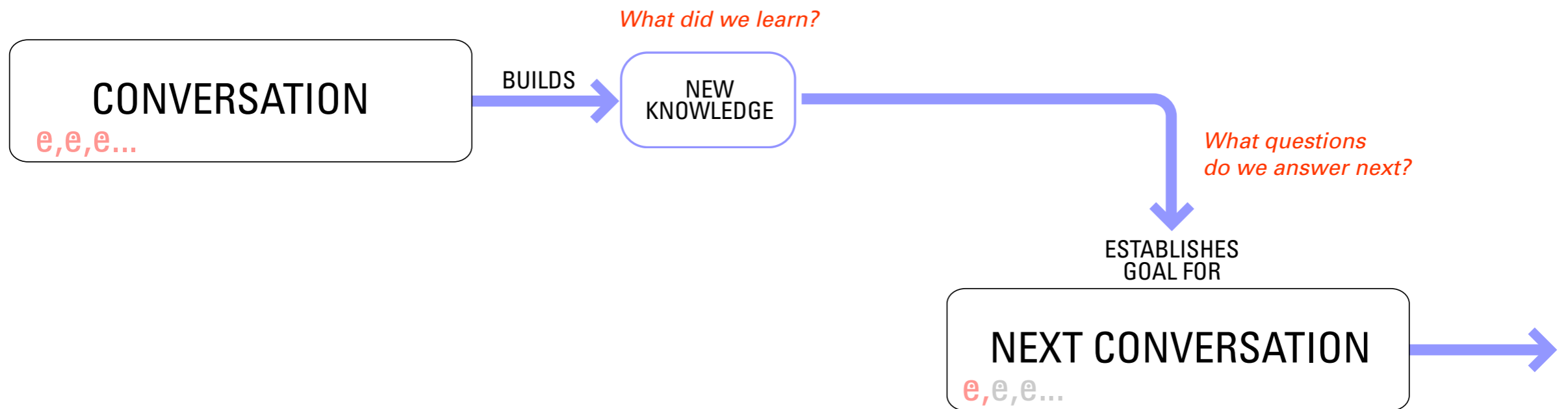
we know our world through conversation.

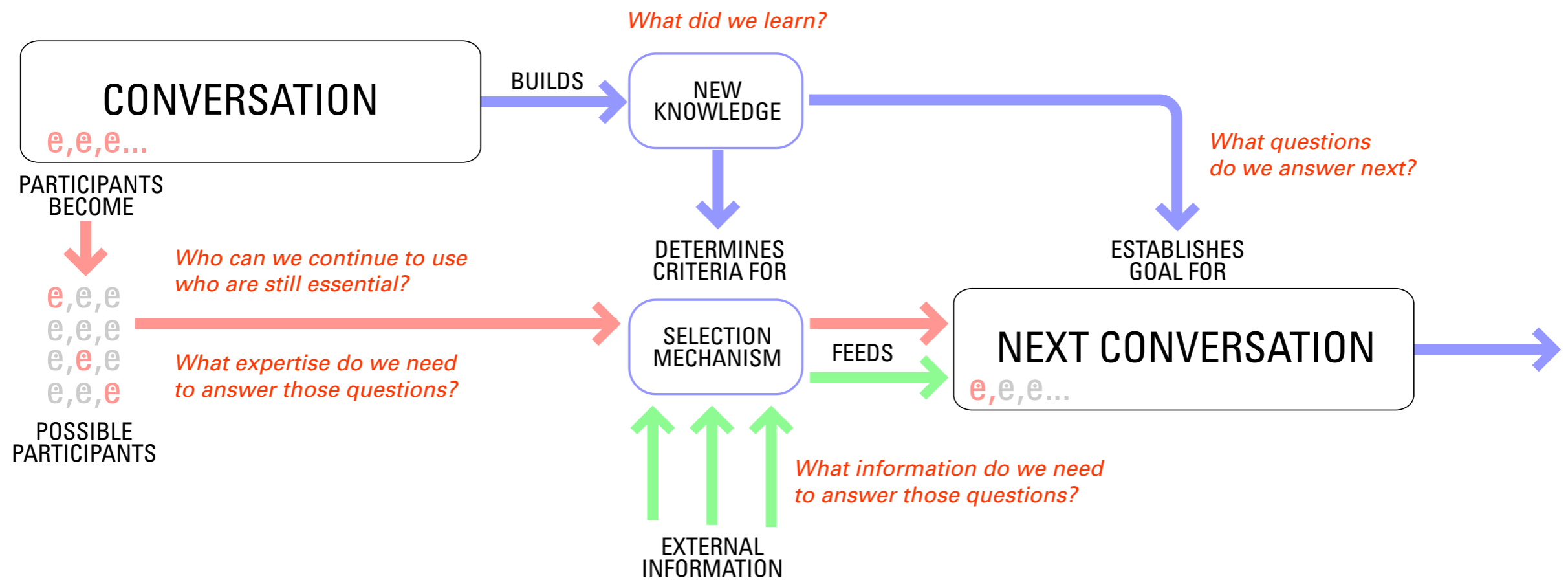
**we constantly risk not being able to hear that which is
outside of what we can talk about,
outside of whom we talk to,
outside of our language, our beliefs, our “truth.”**

**our proficiency for conversation enables and limits what we know—
and, therefore, what we can do.**

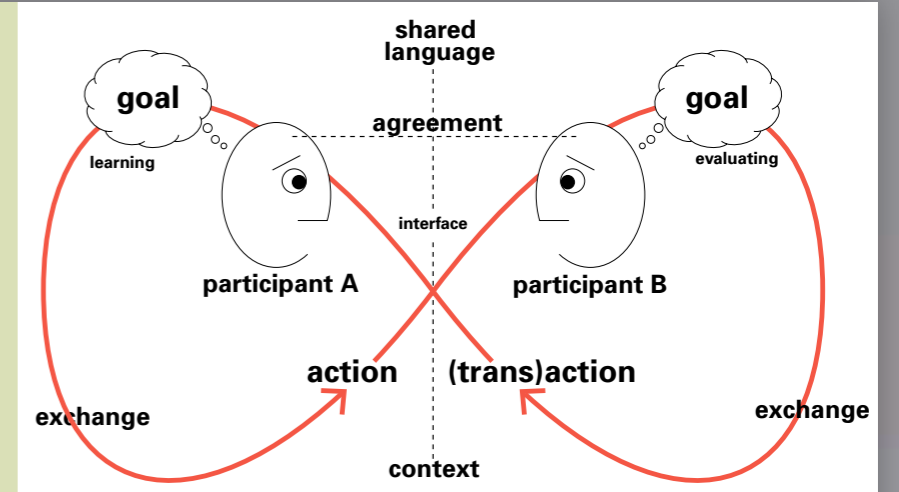
**paying attention to conversation gives us the opportunity
to overcome our current limits.**

paul@cyberneticlifestyles.com





I. Context



finding the right moment to open an exchange

- ▶ consumer must be receptive—when and where is “reasonable”?
- ▶ also means “moment in the market”—when a need is unfulfilled

digital media has created an explosion of contexts

- ▶ email
- ▶ search engine results
- ▶ web page banners, contextual ads
- ▶ mobile phones, geo-location, context-sensing
- ▶ ... plus, traditional media are “going digital”

cafe metro tweets

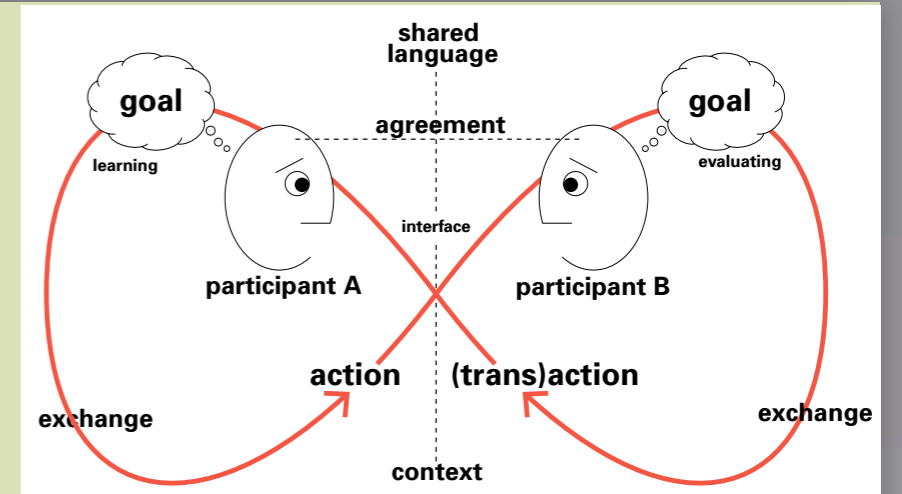
I. Context



I. Context



II. Shared Language



defines what we can converse about

- ▶ starts with vocabulary and ideas that resonate
- ▶ speaks in customer terms
- ▶ tunes into consumer need-states, wants, and desires
- ▶ creates a “language system” that encourages a way of thinking that we want the consumer to adopt

II. Shared Language



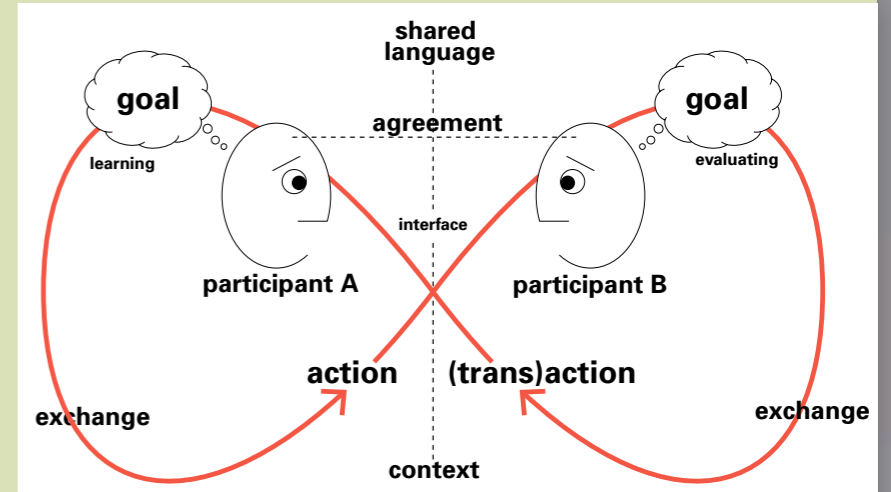
II. Shared Language



II. Shared Language



III. Exchange



2-way co-evolution of ideas

- ▶ should be what we mean by “interactive”
- ▶ must involve listening, offering, questioning
- ▶ must offer some value to keep engagement going
- ▶ may be broken off at any time (by either participant)

useful to both sides in learning about the other

- ▶ consumer learns what is possible, whether to trust
- ▶ marketer learns what consumers think, feel, and want

iPod colors

III. Exchange



The screenshot shows a Facebook interface for a CareWall. At the top, the Facebook logo and navigation links (Home, Profile, Friends, Inbox 22) are visible. Below this, the page title is "The Pangaro Family Care Team" with a "manage" link. A profile picture of Jane Hernandez is shown on the right. A row of sharing options includes "collaborate", "fax", "share by email", "share by cell", "activity", and "documents". The main content area is titled "Jane Hernandez's CareWall" and includes a notice: "Access to this wall is restricted to CareTeam members. [write](#) to Jane Hernandez's CareWall". Two posts are visible: one from "Med Commons" at 6:02pm stating "Jane is a MedCommons Demo Patient. You can care for her via this account until you whenever you want to focus on your own family members.", and another from "Jerome Franklin" at 6:02pm stating "We need to talk about Mom as soon as possible".



III. Exchange

Apple Retail Store. Come to shop. Return to learn.













































III. Exchange



III. Exchange

ad:tech

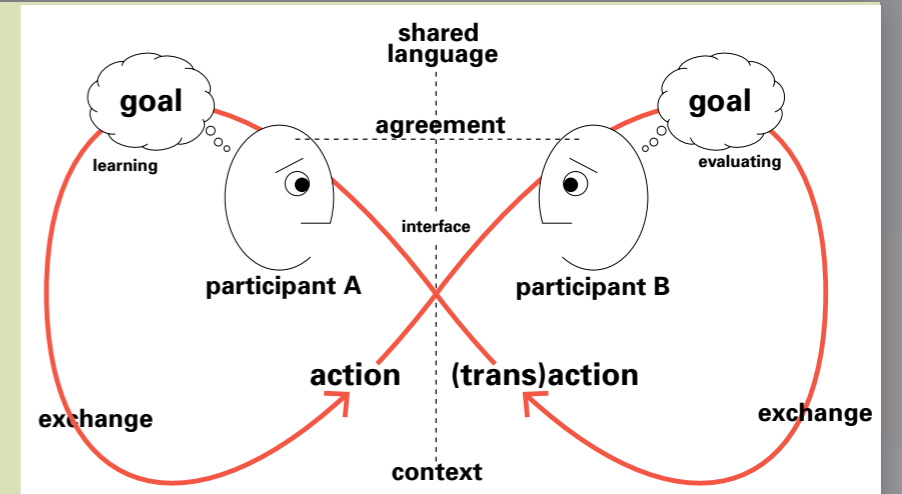
Select a Service:

 AIM	 FriendFeed	 Newsvine
 Ask	 Google Bookmarks	 Propeller
 Backflip	 Kaboodle	 Reddit
 BallHype	 KIRTSY	 Segnalo
 Bebo	 Link-a-Gogo	 Simpy
 Blogmarks	 LinkedIn	 Slashdot
 Delicious	 Live	 Spurl
 Digg	 Mister Wong	 StumbleUpon
 Diigo	 Mixx	 Tailrank
 Facebook	 Multiply	 Technorati
 Fark	 myAOL	 Twitter
 Faves	 MySpace	 Yahoo Bookmarks
 Favorites	 Netvibes	 Yahoo Buzz
 FeedMeLinks	 Netvouz	 Yardbarker

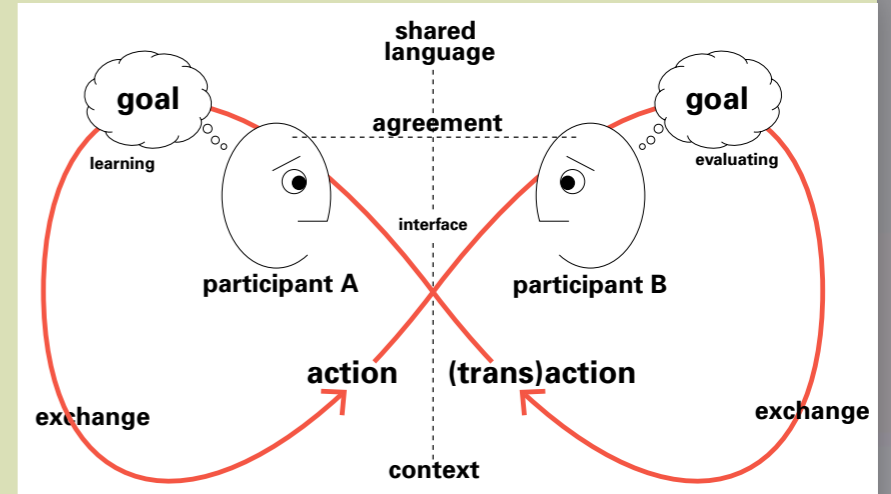
IV. Agreement

shared understanding

- ▶ common history is created
- ▶ trust is built
- ▶ beliefs are validated or changed



IV. Agreement



shared understanding

- ▶ common history is created
- ▶ trust is built
- ▶ beliefs are validated or changed

trust is established (or not)

- ▶ history ensures compatible goals
- ▶ ... and sets expectations for future conversations
- ▶ **trust is powerful – it lowers risk and saves time**

IV. Agreement

AA Advantage Account	My Information and Password	Reservation Preferences	My Emails and Fare Alerts
Home Airport			
New York, NY(JFK)			Edit
Preferred Ticket Type E-Ticket			
E-TICKET EMAIL			Edit
Preferred Carrier			
AA, American Eagle and AmericanConnection@			Edit
Preferred Credit/Debit Card			Add New Card
<input type="radio"/> pan amex	*****		Edit Delete

IV. Agreement

The screenshot shows the Amazon.com homepage for user Paul Pangaro. At the top, the Amazon logo is on the left, and a personalized greeting "Hello, Paul Pangaro. We have recommendations for you. (Not Paul?)" is on the right. Below the greeting is a navigation bar with links for "Paul's Amazon.com", "Today's Deals", "Gifts & Wish Lists", and "Gift Cards". A search bar is also present. Below the navigation bar, there are links for "Shop All Departments", "Paul's Amazon.com", "Your Browsing History", "Recommended For You", "Rate These Items", and "Improve Your Recommendations". A main heading reads "Paul, Welcome to Your Amazon.com (If you're not Paul Pangaro, click here.)". The main content area is titled "Today's Recommendations For You" and contains a carousel of three items:

- Market Wizards: Interviews with Top Traders** by Jack D. Schwager. Price: \$12.21. Rating: 5 stars (118).
- Brahms: Complete Piano Music [Box Set]** by Johannes Brahms. Price: \$29.98. Rating: 5 stars (7).
- Cloverfield** Video On Demand by Michael Stahl-David. Price: \$9.99. Rating: 3.5 stars (671).

IV. Agreement



**ORGANIZING
FOR AMERICA**

"I'M ASKING YOU TO BELIEVE.
Not just in my ability to bring about
real change in Washington ... I'm
asking you to believe in yours."
-BARACK OBAMA

GET EMAIL UPDATES

Email Address

Zip Code



PRESIDENT OBAMA

**THANKS YOU FOR
HELPING TO GET
THE BUDGET PASSED**

[READ HIS MESSAGE](#)



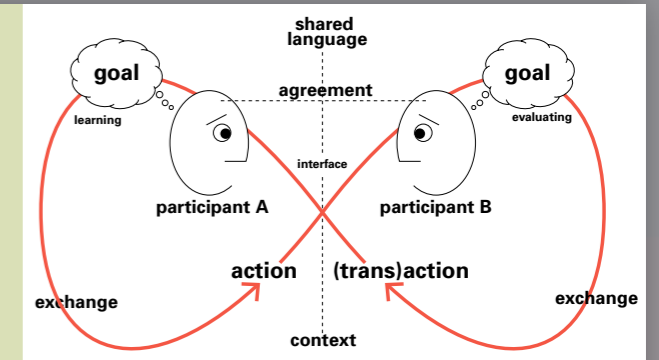
MY.BARACKOBAMA.COM

**ORGANIZE LOCALLY
WITH OUR ONLINE TOOLS**

JOIN A LOCAL GROUP • BLOG
FIND AN EVENT • FUNDRAISE

[LOGIN TO MyBO](#)

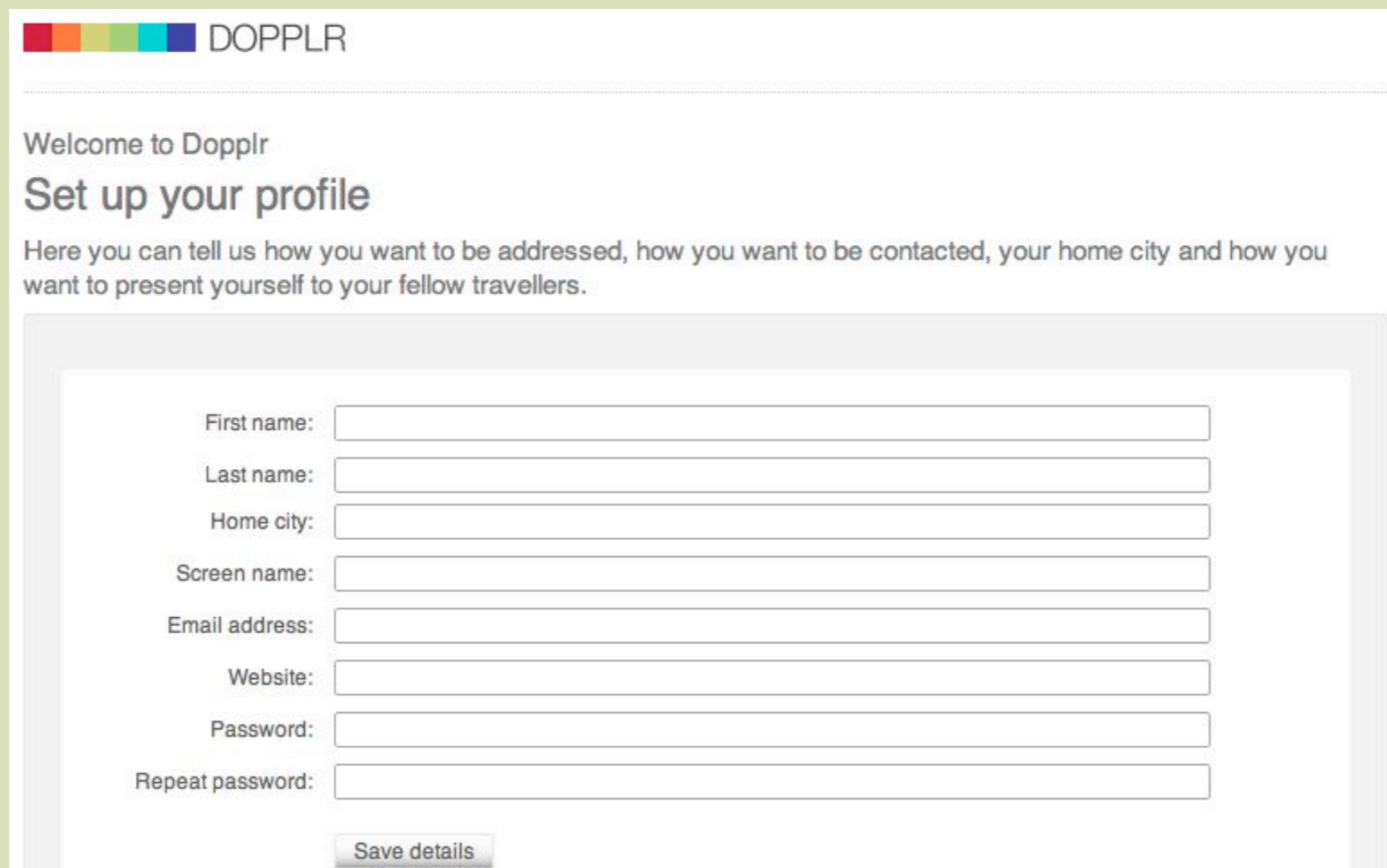
V. Actions or Transactions




coordinate about shared beliefs and shared goals

- ▶ stay connected, continue the conversation
- ▶ participate in communities, social networks, real-world + f2f
- ▶ demonstrate commitment
- ▶ **BUY** product or service

V. Actions or Transactions



 DOPPLR

Welcome to Dopplr

Set up your profile

Here you can tell us how you want to be addressed, how you want to be contacted, your home city and how you want to present yourself to your fellow travellers.

First name:

Last name:

Home city:

Screen name:

Email address:

Website:

Password:

Repeat password:

V. Actions or Transactions



The screenshot shows the Nike+ website's '2008 Rundown' page. The header includes 'NIKE.COM', 'PRODUCT DOWNLOADS', 'REGISTER', 'MY ACCOUNT', and 'NEWSLETTER'. A search bar contains the text 'Get connected to your running experience. Relive your runs. Track your progress.' To the right, there are links for 'NIKE+ USERS: Log in', 'blog', and 'forums'. The main content area is titled '2008 Rundown' and 'Nike+ Community 2008 Rundown'. It features a teal background with white and yellow text and icons. The text reads: 'Our favorite time to run is NIGHTS especially on SUNDAY and our sweatiest month is AUGUST.' Below this are six statistics arranged in a 2x3 grid:

 134,979,939,800 Collective steps	 2,710 Laps around the world	 EYE OF THE TIGER Favorite PowerSong
 630 Households powered	 LUXEMBOURG Small next to Nike+	 2,544,684 Pounds burned

At the bottom of the grid, it says 'See how you did in 2008' with a 'LOG IN TO VIEW' button. Below the grid, there is a horizontal bar with a small icon and the text 'Primer Reto > Most miles over 30 days'. A home button is visible on the right side of the page.

V. Actions or Transactions

