

## **ORIENTATION: BRIDGING THE GAP IN THE AUSTRIAN THEORY OF ENTREPRENEURSHIP**

**MARK J. McGRATH AND HUNTER HASTINGS**

**ABSTRACT:** The aim of this paper is to strengthen the Austrian theory of entrepreneurial judgement by identifying the origin of, and the continuous process flow for, the resource allocation and action decisions made by entrepreneurs in the context of incessant market change. We provide new insights into how entrepreneurs and firms adaptively respond to the resulting outcomes whilst navigating an ever-changing environment.

Austrian economics is realistic in characterizing economies and markets as complex systems of incessant change. As Ludwig von Mises observes in *The Ultimate Foundation Of Economic Science*, “everything is in a ceaseless flux.”<sup>1</sup> Firms participating in markets must embrace these circumstances of continuous change as their normal environment, and act accordingly and effectively.

Traditional views of the firm, including business theory and strategy as taught in business schools, lean towards control and prediction - e.g., strategic positioning, planning, and financial management. But control and prediction are hardly available in an incessantly changing world. In Austrian economics as it applies at the firm level, the approach to selecting the appropriate form of action is often expressed in the terminology of entrepreneurial judgement in conditions of uncertainty - a sequence which incorporates the identification of choices, the selection of one of these, and the post-hoc analysis of the results of the action, with subsequent adjustment incorporated into future actions.

Where and how does judgement originate? Economic theorizing about entrepreneurial judgement is limited to describing the action, assuming the purpose of the action is an economic gain. Some theorists cross a boundary into psychology when they discuss the motives for action. But the how of the action - the subjective mental processes of the actor to arrive at the point of action and to assess its results and consequences amidst the continuous changes in knowledge that occur over time - is seldom addressed. Entrepreneurial judgement remains a mystery.

The paper introduces the concept of orientation as the source of entrepreneurial judgement. Orientation shapes observation and precedes decision-making and action. Orientation is the locus of human preferences and biases; it is the origination source of hypotheses; it is where human cognition resides. It is the source of “human thinking, perceiving and knowing”<sup>2</sup>, and of “a person's conscious adjustment to the state of the universe that determines his life.”<sup>3</sup> Decisions

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<sup>1</sup> Mises, L.v. (2006). *The Ultimate Foundation of Economic Science: An Essay On Method*. Princeton, NJ: D. Van Nostrand Company, Inc. p1

<sup>2</sup> Mises, L.v. (2006). *The Ultimate Foundation of Economic Science: An Essay On Method*. Princeton, NJ: D. Van Nostrand Company, Inc. p1

<sup>3</sup> Mises, L.v. (1998). *Human Action. A Treatise On Economics (Scholar's Edition)*: Auburn, AL: Ludwig von Mises Institute.

and action flow from orientation. We trace the pathway to the concept of orientation that is well-established in the writings of Ludwig van Mises and many more Austrian school economists.

With the introduction of the concept of orientation, this paper identifies the framework in which entrepreneurial judgement takes place, and the components of the framework and their characteristics. We provide a methodology for individuals and groups to use the framework for better judgement and more successful action.

The paper is organized as follows: Section 1 briefly recapitulates the theory of entrepreneurial judgment and identifies a gap; Section 2 identifies and classifies the missing element of orientation, including its epistemology and ontology; Section 3 expands on the epistemology and ontology of orientation to demonstrate its fit with Austrian economics in the thinking of Mises, Rothbard, Hayek, De Soto, Lachmann, and others; in Section 4 we show how orientation integrates into the framework of human action and entrepreneurial action as expressed in the concept of OODA – Observation, Orientation, Decision and Action; in Section 5, we specifically integrate OODA into EJT (Entrepreneurial Judgment Theory); and Section 6 suggests pathways for further research and concept development, especially in the area of bridging entrepreneurial theory and practice.

## **1) Judgment Is At The Core Of Austrian Entrepreneurial Theory**

In their seminal text on the subject of entrepreneurial judgment<sup>4</sup>, Foss and Klein establish judgment as “the key construct”<sup>5</sup> in Austrian entrepreneurship theory, within the context of entrepreneurship as the “driving force of the market economy”<sup>6</sup>. The authors review a broad array of Austrian school economic theorizing in order to support the proposed central role of judgment in entrepreneurship, emphasizing the Bohm-Bawerk-Mises-Rothbard strand of the Austrian tradition that emphasizes decision-making under uncertainty.

Judgment is a “functional”<sup>7</sup> rather than an abstract concept, an action of the real world, flesh-and-blood entrepreneur deploying resources he or she owns or controls, someone who is alert, creative and a leader<sup>8</sup>. Judgment is decision-making about deploying resources to achieve some objectives. It is manifest in the actions of entrepreneurs. It cannot be bought and sold on the market.

Foss and Klein note that individuals will reach different decisions, even if they share the same objectives and if the data is presented to them in exactly the same manner, because “they have access to different information, interpret the data in different ways, and so on”<sup>9</sup>. Why is this the

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<sup>4</sup> Foss, Nicolai J. and Klein, Peter G. (2012). *Organizing Entrepreneurial Judgment: A New Approach To The Firm*. Cambridge, UK. Cambridge University Press.

<sup>5</sup> Ibid, p78

<sup>6</sup> Ibid, p53

<sup>7</sup> Klein, Peter G. (2008). *Opportunity Discovery, Entrepreneurial Action and Economic Organization*. *Strategic Entrepreneurship Journal*. (pp175-190)

<sup>8</sup> Foss, Nicolai J. and Klein, Peter G. (2012). *Organizing Entrepreneurial Judgment: A New Approach To The Firm*. Cambridge, UK. Cambridge University Press. p68

<sup>9</sup> Foss, Nicolai J. and Klein, Peter G. (2012). *Organizing Entrepreneurial Judgment: A New Approach To The Firm*. Cambridge, UK. Cambridge University Press. p68

case? The authors attribute it to “a particular skill, namely that of dealing successfully with resource allocation decisions under uncertainty”<sup>10</sup>. Later in the same passage, they expand the description of the exercise of judgment to encompass “perceptions, skills and heuristics”.

However, the authors identify gaps in the theory of entrepreneurial decision-making. Indeed, they point out that economists have generally shied away from such theorizing<sup>11</sup>. They list a number of “manifest variables and antecedents”, but leave judgment as a “latent construct.”

Other scholars in the field also identify remaining theoretical gaps regarding the antecedents or the source of entrepreneurial judgment. For example, Berglund, Boufsha and Mansoori, in discussing how entrepreneurs act, assert that current theory “does little to guide or improve our understanding of entrepreneurial action leading up to successful (or unsuccessful) outcomes, which is arguably the most appealing both theoretically and practically”<sup>12</sup>.

## 2) Orientation: Bridging The Gap

Let us now introduce the concept of orientation in order to understand its augmentation of Austrian entrepreneurial theory. We shall define orientation, discuss its primary theorist and his scientific and philosophical influences, describe and distinguish its multivalent characteristics, and its centrality to human decision, action, and learning.

Orientation is the internal operating system of an individual which enables them to sense external events through observations, process them in order to assign them meaning and intent, formulate hypotheses in the form of decisions, test those decisions via actions, and learn via feedback loops, continuously as time advances.

In other words, orientation is where and how humans filter data and information in order to transform it into knowledge and understanding that can be decided and acted upon within their respective environments. Orientation continues to operate as time moves forward, continuously making new observations, new decisions, and new actions, all based on new observations via feedback loops. With the continuous flow of information acquired in one’s environment via these feedback loops, individuals strive to make new observations, adjust, or augment their orientation (aka “reorient”), in order to make new decisions and actions to maintain the ultimate goal: “..to improve our capacity for independent action.”<sup>13</sup>

Orientation is a necessary *precedent* to entrepreneurial judgment. It is the *source* of intent that drives entrepreneurial decision-making and entrepreneurial action. It frames the mental model of entrepreneurship.

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<sup>10</sup> Foss, Nicolai J. and Klein, Peter G. (2012). *Organizing Entrepreneurial Judgment: A New Approach To The Firm*. Cambridge, UK. Cambridge University Press. p79

<sup>11</sup> Foss, Nicolai J. and Klein, Peter G. (2012). *Organizing Entrepreneurial Judgment: A New Approach To The Firm*. Cambridge, UK. Cambridge University Press. p93

<sup>12</sup> Berglund, H; Boufsha, M; Mansoori, Y (2020); *Opportunities As Artifacts And Entrepreneurship As Design*, *Academy Of Management Review*, Vol 45 Number 4, pp825-846

<sup>13</sup> Boyd, John (1976). *Destruction And Creation*. Public Domain, via Wikimedia Commons.  
[https://upload.wikimedia.org/wikipedia/commons/a/a6/Destruction\\_%26\\_Creation.pdf](https://upload.wikimedia.org/wikipedia/commons/a/a6/Destruction_%26_Creation.pdf)

## The Epistemology of Orientation: “Destruction and Creation”

The concept of orientation comes from an American strategic theorist named John Boyd<sup>14</sup>. Boyd discovered a theory of learning and understanding that is rooted in making effective decisions, and taking rapid action, in order to learn what adjustments are required in order to survive on one’s own terms, maintain a competitive advantage, or, as Boyd said:

*“...improve their capacity for independent action.”*<sup>15</sup>

In 1976 he discussed these ideas and published a somewhat brief academic paper entitled “Destruction and Creation”<sup>16</sup> where he specified his core concept, orientation. Boyd’s aim for this paper was:

“To understand how the *mind* evolves an interior mental orientation...that permit individuals and groups to cope with changing external conditions.”<sup>17</sup>

For Boyd the central questions were: How and why does our mental state (orientation) evolve in a constant state of change, uncertainty, and ambiguity? How and why do we make decisions? What must an individual, or a group of individuals do in order to “*improve their capacity for independent action?*”<sup>18</sup>

Boyd answers the first question by stating that in order to “cope with our environment we develop mental patterns or concepts of meaning.”<sup>19</sup> Essentially, we process observations within our environment in order to make sense and meaning of it via models and patterns that “we destroy and create.”<sup>20</sup> As environments and situations continuously change, we must keep these “mental patterns and concepts of meaning”<sup>21</sup> updated to the perceived unfolding reality that occurs through time. The idea is that with constant change comes the unending need to update our perceptions and understanding in order to keep it matched to reality so that we may survive, maintain relevance, operate from a position of advantage, etc.

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<sup>14</sup> Colonel John R. Boyd, USAF (Retired), 1925-1997; For more on Boyd please see Coram, Robert. 2002. *Boyd: The Fighter Pilot Who Changed The Art Of War*. New York, Boston, London: Little, Brown and Company.

<sup>15</sup> Boyd, John (1976). *Destruction And Creation*. Public Domain, via Wikimedia Commons. [https://upload.wikimedia.org/wikipedia/commons/a/a6/Destruction\\_%26\\_Creation.pdf](https://upload.wikimedia.org/wikipedia/commons/a/a6/Destruction_%26_Creation.pdf)

<sup>16</sup> “Destruction and Creation,” published on September 3, 1976, was Boyd’s only published work pertaining to his strategic theories. The near entirety of his work was delivered via briefings that could range anywhere from 6-72 total hours.

<sup>17</sup> Spinney, Franklin C. (2020). *Evolutionary Epistemology A personal view of John Boyd’s “Destruction and Creation” and its centrality to the OODA Loop; v2.6*. White Paper. <https://fasttransients.files.wordpress.com/2019/06/evolutionary-epistemology-v2.5.pdf> .All emphasis is Spinney’s.

<sup>18</sup> Boyd repeatedly uses this term in some form, and emphasized it in italics. To Boyd, this was the primary goal of individuals, on their own, or within an organization. Boyd, John (1976). *Destruction And Creation*. Public Domain, via Wikimedia Commons. [https://upload.wikimedia.org/wikipedia/commons/a/a6/Destruction\\_%26\\_Creation.pdf](https://upload.wikimedia.org/wikipedia/commons/a/a6/Destruction_%26_Creation.pdf)

<sup>19</sup> Ibid.

<sup>20</sup> Ibid.

<sup>21</sup> Ibid.

As to the second question, the “biological imperative creates purposive behavior....to survive on our own terms.”<sup>22</sup> By continuously scanning for and identifying mismatches, and reconciling them with our understanding of the environment, we uncover opportunities to create advantages for ourselves, thus improving “*our capacity for independent action.*”<sup>23</sup>

And for the third question, Boyd describes two ways in which one can “develop and manipulate mental concepts (orientation) to represent observed reality...”<sup>24</sup> They are deductive and inductive reasoning, via analysis and synthesis respectively. On the one hand we engage our environment with deductive reasoning. We analyze in order to break down a comprehensive whole into specific component parts. On the other hand, we employ inductive reasoning. We synthesize said parts into something novel that did not previously exist.<sup>25</sup> Boyd suggests that the combination of deductive thinking, via analysis, must be complemented with inductive thinking, synthesis. In other words, as we scan our environment and identify mismatches, we must be able to break down wholes into their component parts via analysis, and in turn recombine these parts into something novel that did not previously exist, via synthesis.<sup>26</sup>

Boyd, an industrial engineer by graduate training, relied heavily on three scientific principles to support his theory around what is required of humans in order to “*improve our capacity for independent action.*”<sup>27</sup> They were, briefly:

1. Incompleteness—As explained by Gödel’s Incompleteness Theorem, basically saying “that any consistent system...is incomplete. In other words, there are true statements that cannot be deduced from the postulates that make up the system.”<sup>28</sup>
2. Indeterminacy —As explained by Heisenberg’s Indeterminacy Principle, basically saying that one can “not simultaneously fix or determine precisely the velocity and position of a particle or body.”<sup>29</sup>

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<sup>22</sup> Spinney, Franklin C. (2020). *Evolutionary Epistemology A personal view of John Boyd’s “Destruction and Creation” and its centrality to the OODA Loop; v2.6.* White Paper.

<https://fasttransients.files.wordpress.com/2019/06/evolutionary-epistemology-v2.5.pdf>

<sup>23</sup> Emphasis Boyd’s. Boyd, John (1976). *Destruction And Creation*. Public Domain, via Wikimedia Commons.

[https://upload.wikimedia.org/wikipedia/commons/a/a6/Destruction\\_%26\\_Creation.pdf](https://upload.wikimedia.org/wikipedia/commons/a/a6/Destruction_%26_Creation.pdf)

<sup>24</sup> Ibid.

<sup>25</sup> Boyd’s most famous example is that of a snowmobile. By breaking down the components and domains of a skier on a slope, a bicycle, a boat with an outboard motor, and a toy tank, and eliminating their conventional descriptions, we can synthesize a snowmobile with the various parts that were previously associated with something completely unrelated. For an excellent description of this, please see Spinney, Franklin C. (2020) “*Evolutionary Epistemology A personal view of John Boyd’s “Destruction and Creation” and its centrality to the OODA Loop; v2.6.*” White Paper <https://fasttransients.files.wordpress.com/2019/06/evolutionary-epistemology-v2.5.pdf>

<sup>26</sup> Boyd, John (1976). *Destruction And Creation*. Public Domain, via Wikimedia Commons.

[https://upload.wikimedia.org/wikipedia/commons/a/a6/Destruction\\_%26\\_Creation.pdf](https://upload.wikimedia.org/wikipedia/commons/a/a6/Destruction_%26_Creation.pdf)

<sup>27</sup> Ibid. Emphasis Boyd’s

<sup>28</sup> Ibid.

<sup>29</sup> Ibid.

3. Entropy – As explained by the Second Law of Thermodynamics, basically stating that “all observed natural processes generate entropy.”<sup>30</sup>

### 3) Austrian Affirmation of Orientation

We suggest that Boyd’s synthesis, which requires an individual to continuously refine their orientation, is akin to the Austrian imperative that individuals act because the future is uncertain. As Mises reminds us:

“No certainty about future conditions is available.”<sup>31</sup>

The concept of orientation is closely, repeatedly and broadly affirmed by Austrian school economists, albeit using a (mostly) different vocabulary than Boyd and his biographers. The starting point is a shared understanding of uncertainty.

Boyd states that

*“Uncertainty is a fundamental and irresolvable characteristic of our lives, no matter how good our observations and theories for explanation are.”*<sup>32</sup>

Mises’ expression is that *“No certainty about future conditions is available.”*<sup>33</sup>

Both Mises and Boyd associate uncertainty with ceaseless change.

Mises: *“Πάντα ἐπὶ, everything is in a ceaseless flux, says Heraclitus; there is no permanent being; all is change and becoming.”*<sup>34</sup>

Boyd introduces the concept of orientation as the means of man’s coping with uncertainty and continuous change:

*“Orientation shapes the way we interact with an environment. It is in a sense the “genetic code” of an organism and organization.”*<sup>35</sup>

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<sup>30</sup> Ibid

<sup>31</sup> Mises, L.v. (2006). *The Ultimate Foundation of Economic Science: An Essay On Method*. Princeton, NJ: D Van Norstrand Company, Inc.

<sup>32</sup> Osinga, Frans. (2007). *Science, Strategy and War: The Strategic Theory Of John Boyd*. London and New York: Routledge

<sup>33</sup> Mises, L.v. (2006). *The Ultimate Foundation of Economic Science: An Essay On Method*. Princeton, NJ: D Van Norstrand Company, Inc.

<sup>34</sup> Mises, L.v. (2006). *The Ultimate Foundation of Economic Science: An Essay On Method*. Princeton, NJ: D Van Norstrand Company, Inc.

<sup>35</sup> Osinga, Frans. (2007). *Science, Strategy and War: The Strategic Theory Of John Boyd*. London and New York: Routledge



Included in Boyd's notion of orientation is the idea of institutional memory in the form of doctrine, practices, values, and shared experiences, that guide action and that inform newcomers in the organization.<sup>36</sup>

Mises locates the same shaping and coping mechanism in thymology which:

*"..deals with the mental processes that result in a definite kind of behavior, with the reactions of the mind to the conditions of the individual's environment. It deals with something invisible and intangible that cannot be perceived by the methods of the natural sciences. But the natural sciences must admit that this factor must be considered as real also from their point of view, as it is a link in a chain of events that result in changes in the sphere the description of which they consider as the specific field of their studies."*<sup>37</sup>

Within the thymological method, Mises includes *verstehen* (understanding) which fully aligns with orientation

*"This specific understanding of the sciences of human action aims at establishing the facts that men attach a definite meaning to the state of their environment, that they value this state and, motivated by these judgments of value, resort to definite means in order to preserve or to attain a definite state of affairs different from that which would prevail if they abstained from any purposeful reaction. Understanding (verstehen) deals with judgments of value, with the choice of ends and of the means resorted to for the attainment of these ends, and with the valuation of the outcome of actions performed."*<sup>38</sup>

In Hayek's *oeuvre*, orientation is represented by the mental act of classification:

*"What we perceive of the external world," says Hayek, "are never all the properties which a particular object can be said to possess objectively, not even only some of the properties which these objects in fact do possess physically, but always only certain 'aspects,' relations to other kinds of objects which we assign to all elements of the classes in which we place the perceived objects. This may often comprise relations which objectively do not at all belong to the particular object but which we merely ascribe to it as a member of the class in which we place it as a result of some accidental collection of circumstances in the past."*<sup>39</sup>

In his later work, Hayek wondered whether the right word was "disposition".

*"It seems to me now that I could have greatly simplified my exposition in the book if I had throughout used the term disposition. ....What I had in mind were...dispositions to interpret further stimuli and dispositions to change dispositions, and also various long chains where*

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<sup>36</sup> Ibid.

<sup>37</sup> Mises, L.v. (2006). *The Ultimate Foundation of Economic Science: An Essay On Method*. Princeton, NJ: D Van Nostrand Company, Inc.

<sup>38</sup> Ibid.

<sup>39</sup> Hayek, Friedrich A. (1952). *The Sensory Order*. Chicago: The University of Chicago Press.

*dispositions succeed other dispositions, with actions coming in at a very late stage only as potential events that might have been produced if certain other stimuli had occurred.”<sup>40</sup>*

Jesus Huerta de Soto articulates orientation towards the flow of new knowledge that makes it impossible to predict specific future consequences, and for which individuals require guides or “automatic pilots” in order to co-ordinate exogenous trends to achieve dynamic efficiency.<sup>41</sup>

And in the theory of Ludwig Lachmann of the market as a process, we find a direct identification of the role of orientation. Lachmann observes that “*what men adjust their plans to are not observable events as such, but their own interpretations of them and their changing expectations about them.*”

He identifies orientation as a key element in the market process.

*“Successive stages of market processes thus reflect nothing so much as successive modes of re-orientation as the mind of the actor fits means to ends in ever new forms prompted by new forms of knowledge and imagination.”<sup>42</sup>*

Thus, in the Austrian economic literature, we find consistent affirmation of the concept of orientation. In the next section, we relate the concept to the fundamentals of human action.

#### **4) Orientation in Human Action**

Orientation is the “internal operating system” of an individual. It is from one’s orientation where observations are shaped, interpreted, understood; and where judgement occurs.

As Frans Osinga, a Boyd scholar points out in his work *Science, Strategy, and War*:

*“Orientation shapes the way we interact with an environment. It is in a sense the ‘genetic code’ of an organism and organization.”<sup>43</sup>*

From orientation comes our decisions, which are defined as a hypothesis of what will occur when we, after deciding, act. From there one continues to “orient” by learning and adjusting from observations, decisions and actions as time continues, assuming that one is able to keep their orientation matched to the realities of their environment, market, etc. Boyd described orientation as the continuous interactions of one’s genetic heritage, cultural traditions, previous experience, received new information, and their ability to analyze and synthesize.

Another way to explain this comes from Frans Osinga, who describes it this way:

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<sup>40</sup> Hayek, Friedrich A. (1982). *“The Sensory Order After 25 Years.” Cognition and the Symbolic Process*. London: Lawrence Erlbaum Associates.

<sup>41</sup> Huerta de Soto, Jesús. 2009. *The Theory of Dynamic Efficiency*. London and New York: Routledge.

<sup>42</sup> Lachmann, Ludwig M. 1986. *The Market As An Economic Process*. Oxford: Blackwell Publishing.

<sup>43</sup> Osinga, Frans. (2007). *Science, Strategy and War: The Strategic Theory Of John Boyd*. London and New York: Routledge



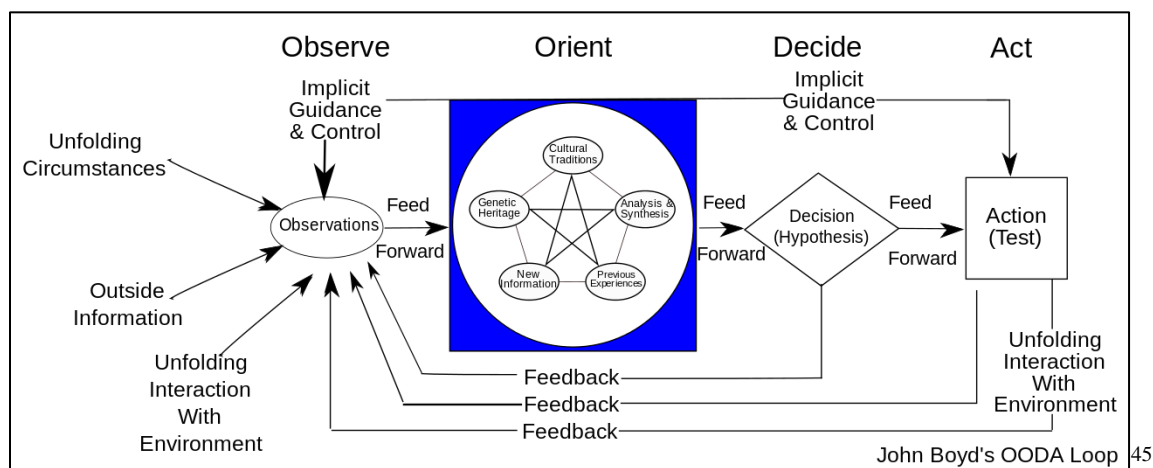
“Orientation is an interactive process of many-sided implicit cross-referencing projections, empathies, correlations and rejections that is shaped by and shapes interplay of genetic heritage, cultural traditions, previous experiences and unfolding circumstances.”<sup>44</sup>

With the concept of orientation now defined, and with a grounding in its epistemology, we will now look at what is arguably John Boyd’s most well-known contribution: OODA Loop

## OODA and OODA Loop

OODA is an acronym for observe, orient, decide, and act. It is the iterative function of one’s orientation, how it processes observations, formulates hypotheses that manifest into decisions, and tests those decisions via action, and immediately cycling back to the beginning via a feedback loop.

Whereas OODA is a continuous process of orientation, “OODA Loop” is a map of how this process functions in time and space.



## The OODA Loop explained

The OODA Loop diagram, as theorized and developed by John Boyd<sup>46</sup>, illustrates the continuous cycle of observe, orient, decide, and act, or, observation, orientation, decision, and action. In other words, it is an illustration of how one’s orientation operates in space and time. It depicts how one’s orientation deals with the external world (from the outside in), and how it internally shapes observations, decisions, and actions (from the inside out).

Explaining OODA from the outside in, we first observe using our senses, we encounter unfolding circumstances, acquire information through interaction with our physical environment.

<sup>44</sup> Ibid.

<sup>45</sup> [https://en.wikipedia.org/wiki/OODA\\_loop#/media/File:OODA.Boyd.svg](https://en.wikipedia.org/wiki/OODA_loop#/media/File:OODA.Boyd.svg)

<sup>46</sup> This final version was drafted in 1996, one year before Boyd passed away. It was the final result the work he set out to do beginning with “Destruction and Creation” in 1976.

Secondly, observations feed forward into our orientation, where we “orient” and “reorient.” Put another way, we filter our observations in order to interpret and understand our environment. Recall that orientation is made up of our cultural traditions, genetic heritage, ability for learning, our previous experiences, and our ability to analyze and synthesize. This process continues as time moves forward with a decision, defined as a hypothesis, which is in turn tested via action. We receive feedback loops from decisions and actions, whereupon we make a new series of observations, a reorientation, new decisions and actions, and so on.

As they cycle through OODA, the adaptive individual or team continuously adjusts and refines their orientation in order to make faster decisions and act on them quicker than their opponents (should we say competitors?), in order to “improve their capacity for free and independent action.” This continuous learning is called “reorienting.” In other words, the orientation remains dynamic by being open and flexible, thus allowing rapid adaptation to changing environments where chaos and disorder constantly increase. On the other hand, a static orientation, or one that does not reorient and learn, begins to slow in its decisions and actions. Ultimately, a slowing OODA Loop will freeze and shatter, no longer able to function, thus it will be defeated by the more adaptive individual or team.

The centrality of orientation cannot be overstated for Austrian entrepreneurial theory, especially when we consider how OODA functions from the inside out. Orientation guides and shapes how we observe the environment and unfolding circumstances. For example, an Austrian economist views the money supply dramatically differently than a Keynesian economist because their differences in orientation affect how they see things. The differences in education, experiences, values, etc, all of which make up their respective orientations, influence how they can view the same set of facts differently.

Additionally, orientation can guide and shape actions to the point where they can be reflexive. An example might be what a person does instantly when a fly lands on their head. The situation has occurred enough to impress upon one’s orientation to act immediately and swat the fly, rather than fully cycling through the entire process of OODA. When the implicit guidance and control exercised by orientation become reflexive like this, feedback loops can become inoperative, and learning can stop. The actor “knows what to do” without further analysis, enabling speed, and compressing time scales for action relative to competitors. This releases energy and focus for the processing of new knowledge (although it could also, potentially, result in reduced alertness to change in parts of the environment).

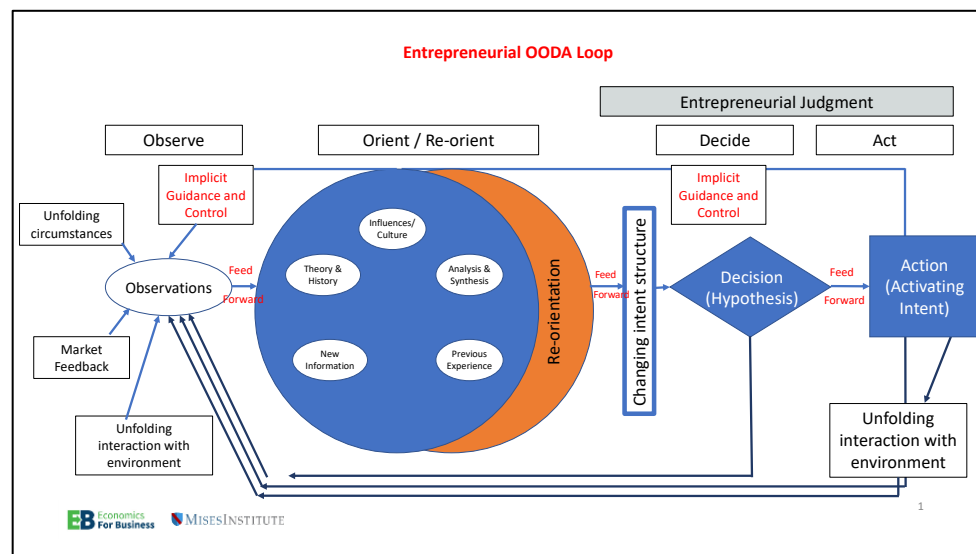
These two points are critical in understanding the centrality of orientation and the need to continuously update and refine it. A dynamic orientation, that is to say one that is continuously refined and matched to the realities of one’s environment, can accelerate the process of OODA in order to gain a time advantage over competitors, the rate of change, etc. In other words, the more effective we are at orienting, the quicker we can make decisions and actions. Ultimately this improves one’s “capacity for independent action,” empowering them to overcome the challenges and obstacles posed by the constants of change and uncertainty.

## 5: OODA Loop And Entrepreneurial Judgment.

Capacity for independent action is central to entrepreneurship and entrepreneurial judgment. Understanding orientation and how it functions allows individuals and teams to direct and coordinate purposeful action in order to achieve goals and objectives. Simply put, orientation is the direct influence on how an entrepreneur makes observations, and how he/she makes decisions, which in turn leads to action. In the context of Austrian entrepreneurial theory, we can challenge the proposition that judgment is “naked,” with nothing preceding it or causing it (or nothing mediating between observation and decision/action). Here we offer that orientation, and its function as illustrated by John Boyd’s OODA Loop, augments the judgment theory. Orientation explains the entrepreneur (something Austrian entrepreneurship theory has always struggled with) without resorting to psychology or personality.

In a paper entitled “*What Is Judgment?*”<sup>47</sup> Bylund and Packard reconceptualize entrepreneurial judgment as a contingent and subjective *intent determination and actualization* process (emphasis in the original). “Judgment responds to ever-changing knowledge, the individual’s interpretation and understanding of reality...by redirecting one’s action-driving intent towards new ends, inspiring new plans, and corresponding actions to attain those ends.” Thus, Bylund and Packard isolate intent as an additional component of judgment, in addition to and preceding decision and action.

From this perspective, it is possible to integrate the OODA Loop with EJT (Entrepreneurial Judgment Theory).



- Orientation precedes judgment and is its ultimate source. Entrepreneurs process all information from the market and all their interactions with their environment through their orientation.

<sup>47</sup> Bylund, P.L & Packard, M.D. (2022) What Is Judgement. In Press.

- The nature of orientation is to exert implicit guidance and control over the entrepreneur's observations (what they "see" and what data they "take in"), over decision-making (how they decide), and over intent (the ends they choose and their plans to achieve those ends). However, the alert entrepreneur is conscious of this implicit guidance – biases, in other words – and open to adjustments and adaptation. Adaptiveness is always-on for the entrepreneur.
- New information and the entrepreneur's always-on adaptiveness result in continuous orientation and re-orientation. Entrepreneurs constantly challenge their own assumptions, and continuously monitor for exogenous change to which to respond.
- A potential outcome of re-orientation is an adjustment of intent. While intent is integral to orientation, it is adaptive to re-orientation and entrepreneurs may alter their ultimate intent, or their intent regarding intermediate goals, or their intent regarding which means to employ to achieve their ends. Entrepreneurial intent is always malleable in the adaptive entrepreneurial approach.
- The changed intent of the entrepreneur redirects decision-making (the hypothesis about what action should be taken) and the action itself (the activation of the entrepreneurial decision).
- Action constitutes further interaction with the environment and new information in the feedback loop system, to be processed through observation and feed the next cycle of re-orientation.

Mises' constant flux is instantiated in the entrepreneurial OODA loop.

## 6: Further Research And Development

The promise of further development of the orientation concept for Austrian economics lies both in theorizing and in practical applications of theory.

### Theory

The Austrian subjectivist theory of entrepreneurship<sup>48</sup> contrasts with various positivist approaches to entrepreneurial theory including, for example, design theory<sup>49</sup>.

Design theory positivists view entrepreneurs as being able to "impose on the situation a coherence that guides subsequent moves"<sup>50</sup> and establish "preconceptions that guide action".<sup>51</sup>

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<sup>48</sup> Bylund, Per L., Packard, Mark D. (2021). Subjective value in entrepreneurship. Small Business Economics (Springer)

<sup>49</sup> Berglund, H, M Boufsha, and Y Mansoori. (2020). "Opportunities As Artifacts And Entrepreneurship As Design." *Academy Of Management Review*, Volume 45, No. 4.

<sup>50</sup> Schon D.A. (1988) "Designing: Rules, Types and Worlds," *Des Stud* 9

<sup>51</sup> Selden, P.D., Fletcher, D.E. (2019). "The Tacit Knowledge of Entrepreneurial Design: Interrelating Theory, Practice and Prescription In Entrepreneurship Research"; *Journal of Business Venturing Insights*

A subjectivist approach, incorporating orientation, would provide an alternative, non-prescriptive approach. Packard, Bylund and Clark have explored the subjectivist foundations of Austrian design theory in entrepreneurship.<sup>52</sup> They ground Austrian design theory in individualism, intentionality and interpretation. Citing methodological individualism, they assert that a subjectivist design science is necessarily based in individual intentionality and interpretation. Further theorizing on orientation and how it shapes individual intentionality and interpretation can reinforce the subjectivist foundations of design science and is a high-potential field for study for Austrian entrepreneurship theory.

On the question of subjectivist design (in contrast to the traditional positivist approach of Herbert Simon<sup>53</sup>, for example, Elias, Chiles and Crawford find that entrepreneurial imagining (1) is deeply entwined with perceiving and thinking; (2) involves partly ex nihilo creation; (3) comprises elements that interconnect, continually and iteratively informing one another; (4) unfolds in response to context; (5) entails a forward-looking perspective and an inter-play among past, present, and future; (6) involves both conscious and unconscious processes; and (7) is an embodied and situated process requiring self-awareness and self-reflection. All seven of these elements can be captured within orientation, which both includes and shapes imagination. A theory of orientation could potentially achieve their integration.

## Practice

Questions such as “Is there an entrepreneurial mindset?” and “Can entrepreneurs be trained?” have vexed the teaching of entrepreneurship in schools. A further development of the practical learning for orientation and for “the successive modes of re-orientation as the mind of the actor fits means to ends in ever new forms prompted by new forms of knowledge and imagination” may have promise for the encoding of professionalizing entrepreneurship.

More important is the prospect of an emerging understanding of dynamic orientation and re-orientation in contributing to a further strengthening of the practical value of Austrian-style entrepreneurship. Business schools, consultants and other producers of business content focus on strategies and tactics, and the details of how entrepreneurs can execute business programs - recipes and prescriptions for implementation. An approach that commences with ever-changing orientation impels practitioners towards a more thorough understanding of theory and a focus on the purpose and rationale of action rather than the details of implementation. With command of orientation, the right course of action becomes self-evident because it is grounded in principles, values and fundamental truths. Adaptive actions taken at speed in the midst of change are guided by established axioms. An orientation-based action framework for practitioners can be the basis for “Austrianizing the business discipline<sup>54</sup>”

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<sup>52</sup> Packard, M. D., Bylund, P.L., Klein, P.G. (2022) Human Action and Human Design: An Austrian Approach to Design Science, *Journal of Business Venturing Design* (submitted),

<sup>53</sup> Elias S.R., Chiles T.H., Crawford B. (2021) *Entrepreneurial imagining: How a Small Team of Arts Entrepreneurs Created the World's Largest Traveling Carillon*. *Organization Studies* 2021:01708406211035501.

<sup>54</sup> Phelan, S.E., McCaffrey, M., Klein, P.G., Gupta, V.K., Packard, M.D., Bylund, P.L. (2020). *Austrian Economics In Contemporary Business Applications*. Auburn. AL. Mises Institute

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