



## Synecotics And Creative Capacity: Gordon's Enduring Pedagogy

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### Abstract

This paper examines the synectics model developed by William J. J. Gordon in 1961, a framework for understanding and teaching creativity that has been alternately celebrated, neglected, and rediscovered over the past six decades. Gordon's central claim that creative processes are not mysterious gifts but describable and teachable cognitive operations challenged the romantic mystification of genius that characterized mid-twentieth-century psychology and continues to remain relevant today. The study traces Gordon's intellectual influences, including Gestalt psychology, pragmatism, and Arthur Koestler's theory of bisociation. It also explores the four analogical mechanisms that form the core of the synectics method and evaluates their application in English language and literature classrooms, with particular reference to recent work by Yohannan and Thamarasseri on innovative teaching models. While acknowledging the limitations of the synectics approach, the paper argues that it should not be viewed as a simple formula for producing creativity. Rather, it represents one of the more carefully theorized and practically useful pedagogical tools available to educators seeking to move beyond rote instruction while maintaining an element of structured learning.

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**Keywords:-** Synectics, Creativity Theory, William J.J. Gordon, Analogical Thinking, English Language Pedagogy, Innovative Teaching

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### Introduction

Everyone talks about creativity in education. Administrators invoke it in mission statements. Curriculum designers build it into learning outcomes. Employers tell survey after survey that they want graduates who can "think creatively." And yet ask any teacher what creativity actually means, how you recognize it, how you teach it, and you will get, more often than not, a vague gesture toward something ineffable. Creativity is, in educational discourse, one of those concepts that functions better as aspiration than as description.

William J.J. Gordon thought this was nonsense. Or at any rate, he thought it was unnecessary nonsense. Working in the 1950s with industrial inventors and engineers at the Arthur D. Little company in Cambridge, Massachusetts, Gordon spent years tape-recording creative problem-solving sessions, transcribing them, and hunting for recurring cognitive patterns. What he found was that breakthrough ideas consistently emerged through analogical thinking through the unexpected yoking of domains that had no obvious connection (Gordon

33). The name he gave to his system was synectics, from the Greek for "joining together of different elements," and in 1961 he published the book that would make it famous: *Synergetics: The Development of Creative Capacity*.

The claim at the core of synectics is deceptively simple and genuinely radical: creative processes can be described in operational terms and taught to ordinary people. Not inspired into them, not coaxed out through unstructured brainstorming, but taught through specific, sequenced techniques of analogical and metaphorical thinking. The dominant view of creativity in Gordon's day was still deeply romantic (the lone genius, the lightning bolt of inspiration), and the psychometric approach pioneered by Guilford and Torrance could measure creative aptitude but could not explain the process. Gordon's contribution was to move from measurement to mechanism. That is a bigger shift than it sounds.

### **Gordon's Background: An Unconventional Path**

Gordon was not a psychologist. He was not, strictly speaking, an academic at all. He came from the world of industrial design and invention, and this matters, because it gave his observations a concreteness that more purely theoretical accounts of creativity tend to lack. He was watching real people solve real problems in real time, and the patterns he identified emerged from hundreds of hours of recorded sessions, not from laboratory experiments or psychometric instruments.

What struck him most forcefully and what becomes the organizing insight of the entire synectics enterprise was the centrality of metaphor and analogy. The engineers and inventors he observed did not arrive at solutions through step-by-step deduction. They got there by making wild, seemingly irrational connections: comparing a mechanical problem to the behavior of insects, or a design challenge to the structure of a seashell. Arthur Koestler, working independently, arrived at a strikingly similar conclusion three years later in *The Act of Creation*, calling the process "bisociation" the intersection of two previously unconnected frames of reference (Koestler 35). That two researchers approaching the question from such different angles reached the same conclusion is, I think, significant.

Gordon drew on eclectic sources: Gestalt psychology's emphasis on pattern and perception, the pragmatism of James and Dewey, bits of psychoanalytic theory about unconscious association. But his distinctive move was to insist that these insights could be synthesized into a teachable method not a philosophy of creativity or a theory about creative people, but a set of procedures that anyone could practice and improve. This insistence on operationalizability is both the strength and the vulnerability of the synectics model, as I discuss later.

### **Making the Strange Familiar, Making the Familiar Strange**

The conceptual heart of synectics lies in two complementary processes, and their elegant asymmetry is worth dwelling on. The first making the strange familiar is essentially the process of comprehension: taking something new and unfamiliar and relating it to what you already know. Students do this constantly: they encounter a new concept and assimilate it into existing frameworks. Teachers facilitate it with analogies, examples, and scaffolding. It is necessary, but it is not creative. It domesticates novelty rather than exploiting it.

The second process making the familiar strange is where the creative work happens, and it is much harder to teach because it runs against the grain of virtually everything conventional education rewards. Making the familiar strange means deliberately disrupting habitual perception, looking at ordinary things as if you have never seen them before, turning objects and ideas upside down and sideways to see what new patterns emerge. Gordon was not the first to notice this mechanism the Russian formalists called it *ostranenie*, and Brecht's

Verfremdungseffekt operates on similar principles but he was among the first to propose it as a teachable cognitive skill rather than an artistic gift (Gordon 37).

The pedagogical implications are significant, and somewhat uncomfortable. Schools overwhelmingly privilege the first process. Get the right answer. Reduce ambiguity. Assimilate the new into the known. Synectics insists that genuine learning like genuine creativity requires the willingness to dwell in unfamiliarity, to tolerate not knowing, to entertain connections that initially seem absurd. As Bruner argued in a different context, the most powerful learning happens at the edge of established categories, where things stop making sense in the usual way (Bruner 68). Most classrooms are not designed for that kind of discomfort.

## The Four Analogies

Gordon identified four types of analogy as the primary tools through which the synectics processes operate, and each deserves some attention. Personal analogy asks you to identify empathetically with whatever you are studying to imagine being a chemical molecule, a fictional character, a grammatical structure migrating between languages. It sounds silly, and in practice it can feel silly, which is part of the point: the silliness loosens the grip of habitual thinking.

Direct analogy is more straightforward: explicit comparison between two different domains. Alexander Graham Bell compared the bones of the ear to a telephone membrane. A student might compare the structure of a sonnet to the layout of a garden. Prince, Gordon's collaborator, emphasized that the most productive direct analogies are those drawn from domains maximally distant from the problem (Prince 78) which is counterintuitive but makes sense if you think about it. Close analogies reproduce existing assumptions; distant ones force genuine reconceptualization.

Symbolic analogy, sometimes called compressed conflict, involves oxymoronic juxtapositions: "living death," "aggressive passivity," "structured freedom." These function as cognitive irritants, forcing the mind to reconcile incompatible ideas and discovering new meanings in the process. For literature teachers, this mechanism is practically a gift it maps directly onto the discussion of paradox, irony, and ambiguity that any good literary education requires.

Fantasy analogy suspends reality constraints entirely. What if gravity worked sideways? What if English had no prepositions? What if a poem could be read backward? By entertaining impossibilities, fantasy analogy breaks the tyranny of the actual and opens imaginative space. Vygotsky's work on imagination in children provides theoretical backing: imaginative play is not an escape from reality but a method of exploring and expanding it (Vygotsky 15). Adults, unfortunately, tend to lose this capacity unless someone deliberately cultivates it.

## Synecotics in the English Classroom

The application of synectics to language and literature teaching has attracted growing interest, and Yohannan and Thamarasseri's recent study is a helpful contribution. They position synectics alongside other innovative models jurisprudential inquiry, role play, concept attainment, advance organizers and argue for its potential to engage learners in active, creative processing of linguistic material (Yohannan and Thamarasseri 58). The emphasis on active processing is key: synectics asks students to do something with language, not just receive information about it.

In literature classrooms, the possibilities are particularly rich. Close reading real close reading, not the mechanical identification of literary devices that too often passes for it requires exactly the defamiliarization that Gordon's second process promotes. Ask students to read a familiar poem as if they were encountering human language for the first time. Ask them to translate a passage of Dickens into the emotional register of a weather forecast. Ask them to

express a novel's central conflict as a compressed conflict in two words. These are synectics exercises, whether or not the teacher uses the term, and they generate engagement at a depth that conventional discussion questions rarely achieve.

Joyce and Weil include synectics in their influential *Models of Teaching*, outlining two classroom strategies: *Creating Something New* (using analogies to generate original work) and *Making the Strange Familiar* (using analogies to understand difficult concepts) (Joyce and Weil 219). Both have been adapted for English classrooms. The evidence, I should say honestly, is encouraging but not overwhelming rigorous empirical evaluation of synectics in language teaching remains limited, and the field would benefit from more controlled studies.

## Honest Limitations

Synectics is not without problems, and I want to name them rather than pretending they do not exist. First, the model originated in industrial problem-solving, where "creative success" has relatively clear criteria: the invention works or it does not, the design problem is solved or it is not. In humanistic and aesthetic domains, criteria for creativity are murkier, more contested, and more culturally variable. Transferring a method from engineering to poetry is not a straightforward operation.

Second, Gordon's research was conducted with groups, and the group dynamics the way one person's analogy sparks another's, the social permission to be silly may be as important as the cognitive techniques themselves. Individual creative work, which is what most writing and much literary analysis ultimately involves, may not respond to the same procedures in the same way.

Third, there is a risk of reducing creativity to technique. Ken Robinson's widely cited arguments about creativity in education point toward a broader conception that includes not just cognitive processes but institutional conditions curriculum design, assessment practices, school culture (Robinson 116). Torrance's longitudinal studies suggest that creativity is a disposition shaped by environment and personality across a lifetime, not just a skill activated by the right exercise (Torrance 44). Synectics addresses one piece of a much larger puzzle. Claiming more than that does the model no favors.

## Conclusion

For all its limitations, Gordon's synectics remains sixty-odd years on one of the more carefully thought-out and practically actionable models of creative pedagogy available. Its core insight, that creative thinking depends on disciplined analogical reasoning rather than mystical inspiration, has been amply confirmed by subsequent cognitive science (Hofstadter and Sander offer a particularly compelling recent treatment (Hofstadter and Sander 24). The four analogical mechanisms provide teachers with concrete tools rather than vague exhortations, and the two fundamental processes making the strange familiar and making the familiar strange offer a conceptual framework of genuine elegance.

But synectics works best, I think, when it is embedded in a broader educational philosophy that values intellectual risk, tolerates ambiguity, and rewards genuine exploration rather than the reproduction of expected answers. It is a set of cognitive strategies, not a substitute for good teaching. For English teachers who are tired of the false choice between grammar drills and unstructured "creative writing" exercises, synectics offers a principled middle path structured enough to be teachable, open enough to surprise. That is a rare and valuable combination.

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