THE PERCOLATOR

A Model for Intercultural Dialogue

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Human to Human GROWTH

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"Ambiguity creates the learning edge. Curiosity draws us towards it. Courage enables us to cross it."

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Abstract

The Percolator is an original conceptual model developed by Aspasia Protogerou for understanding intercultural dialogue as a dynamic, relational and iterative process of encounter, uncertainty, reflection and transformation. It deliberately moves away from cultural essentialism: rather than treating people as representatives of fixed national, ethnic, linguistic or religious categories, it approaches each person as a unique, complex and continuously evolving culture.

The model uses the physical process of coffee percolation as a systems metaphor. Encounter with difference generates movement; a mismatch between what is expected and what is encountered opens a Learning Edge of Productive Ambiguity; vulnerability may arise at that threshold; curiosity draws the learner towards what is not yet understood, courage supports movement into it, and engagement carries the encounter forward. Intercultural and relational values, together with a Brave Relational Space, shape the process; reflection and integration enable existing mental models to be reconsidered; and an Emergent WE may form without requiring individual MEs to disappear.

The paper positions The Percolator within intercultural citizenship education, experiential and non-formal learning, ambiguity research, curiosity and prediction-error research, vulnerability scholarship and brave-space pedagogy. It presents the conceptual architecture and selected evidence while intentionally withholding the complete facilitation protocol contained in the protected master dossier.

Keywords: intercultural dialogue; intercultural learning; non-formal education; ambiguity; curiosity; courage; vulnerability; experiential learning; brave space; identity; emergent WE

1. Why another model of intercultural dialogue?

Intercultural dialogue is often introduced through visible difference: nationality, ethnicity, language, religion or migration background. These dimensions can matter deeply, but they can also become ready-made explanatory boxes. When the category is allowed to precede the person, the encounter risks becoming an interaction with an assumption rather than an interaction with a human being.

The Percolator begins elsewhere. It proposes that every person may be approached as a living, evolving culture: a changing constellation of experiences, identities, relationships, memories, values, beliefs, privileges, wounds, contradictions, aspirations and choices. From this perspective, interculturality is not an exceptional condition that appears only when people from visibly different groups meet. It is potentially present whenever two lived worlds genuinely encounter one another.

This framing is compatible with the non-essentialist direction of intercultural citizenship education, which emphasises multiple identities, self-questioning, openness to difference and the need to avoid reducing participants to a single cultural category (Anna Lindh Foundation, 2017). The Percolator extends this into a foundational proposition: the other is not first encountered as a representative of a group, but as a being whose lived reality cannot be fully predicted from a label.

2. From human-to-human to being-to-being

Human to Human GROWTH is the professional framework in which the model has developed. The Percolator nevertheless points towards a deeper philosophical horizon: being-to-being encounter.

Being-to-being does not deny social identities, histories or power relations. It refuses to let any one of them exhaust the meaning of a person. The term names a quality of attention in which the other is approached before certainty, stereotype or role becomes the dominant interpretive frame.

Within this horizon, authentic dialogue includes the possibility of being affected by the encounter. Listening while remaining entirely impermeable to the other may constitute communication, but it does not necessarily constitute transformative dialogue. Difference is therefore not a problem to be solved, and the purpose is neither consensus nor conversion.

3. Productive Ambiguity: the Learning Edge

A central development of The Percolator is the concept of Productive Ambiguity. Intercultural competence frameworks commonly include willingness to tolerate ambiguity, alongside curiosity, openness, empathy, flexibility and suspension of judgement (Anna Lindh Foundation, 2017). The Percolator goes further by asking what ambiguity may do in the learning process.

Learning research suggests that existing representations are especially likely to be updated when new information does not fully fit prior expectations. Prediction error, uncertainty and ambiguity can alter learning rates and memory updating, although the relationship is not linear and not all uncertainty is useful (Chumbley et al., 2012; Lee et al., 2015; McGuire et al., 2014; Sinclair et al., 2021). Research on attention and learning also supports a “Goldilocks” principle: information that is neither too predictable nor too chaotic may be particularly engaging or learnable (Kidd et al., 2012; Wilson et al., 2019).

The Percolator therefore uses Productive Ambiguity to describe a learnable threshold: the point at which an existing interpretation is no longer sufficient, yet the encounter remains structured enough to be explored rather than merely overwhelming. This is the Learning Edge. The claim is conceptual and neuroscience-informed; it is not a claim that a specific neural threshold for intercultural learning has been established.

4. Vulnerability, curiosity and courage

When an existing understanding no longer fits, uncertainty may become personally exposing. Brené Brown’s work on vulnerability - framed in terms of uncertainty, risk and emotional exposure - offers a useful complementary lens for understanding why authentic dialogue can feel consequential (Brown, 2012; Brown, 2021). The Percolator does not treat vulnerability as a goal, nor does it ask participants to disclose trauma or private experience. It treats vulnerability as something that may arise when the outcome of an encounter cannot be fully controlled.

Curiosity matters at this threshold because it directs attention towards what is not yet understood. Research by Gruber, Gelman and Ranganath (2014) links states of epistemic curiosity with enhanced learning and hippocampal-dependent memory. Yet curiosity alone does not fully explain movement into an uncertain encounter.

The model therefore introduces Courageous Curiosity: curiosity creates orientation towards the unknown; courage supports the decision to move towards it even while uncertainty and vulnerability remain present. Engagement is the enacted movement. The distinction can be summarised as follows: ambiguity creates the learning edge; curiosity draws us towards it; courage enables us to cross it.

5. The Brave Relational Space

The Percolator does not equate safety with the absence of discomfort. Ethical facilitation must protect dignity, consent, participation and freedom from humiliation, coercion or deliberate dehumanisation. At the same time, meaningful dialogue cannot promise that participants will never experience uncertainty, disagreement or self-questioning.

The concept of Brave Relational Space builds on brave-space pedagogy, particularly Arao and Clemens (2013), while adapting it to the architecture of this model. Its function is not to resolve ambiguity for the learner. Its function is to hold ambiguity in a relationally and ethically workable form long enough for curiosity, courage, reflection and learning to become possible.

In the Percolator metaphor, this relational structure performs an essential systems function: it contains and directs energy rather than eliminating it. The aim is neither a frictionless room nor productive discomfort at any cost. The facilitator and the group continually distinguish challenge from harm, courage from coercion, and uncertainty from conditions that are no longer learnable.

6. The Percolation Metaphor

The physical process of percolation provides the organising metaphor for the model. The visual map below presents the public conceptual sequence; it should not be read as a rigid linear staircase. Intercultural development is iterative and recursive: a learner may move forward, pause, return, reinterpret and enter a later encounter from a changed starting point.

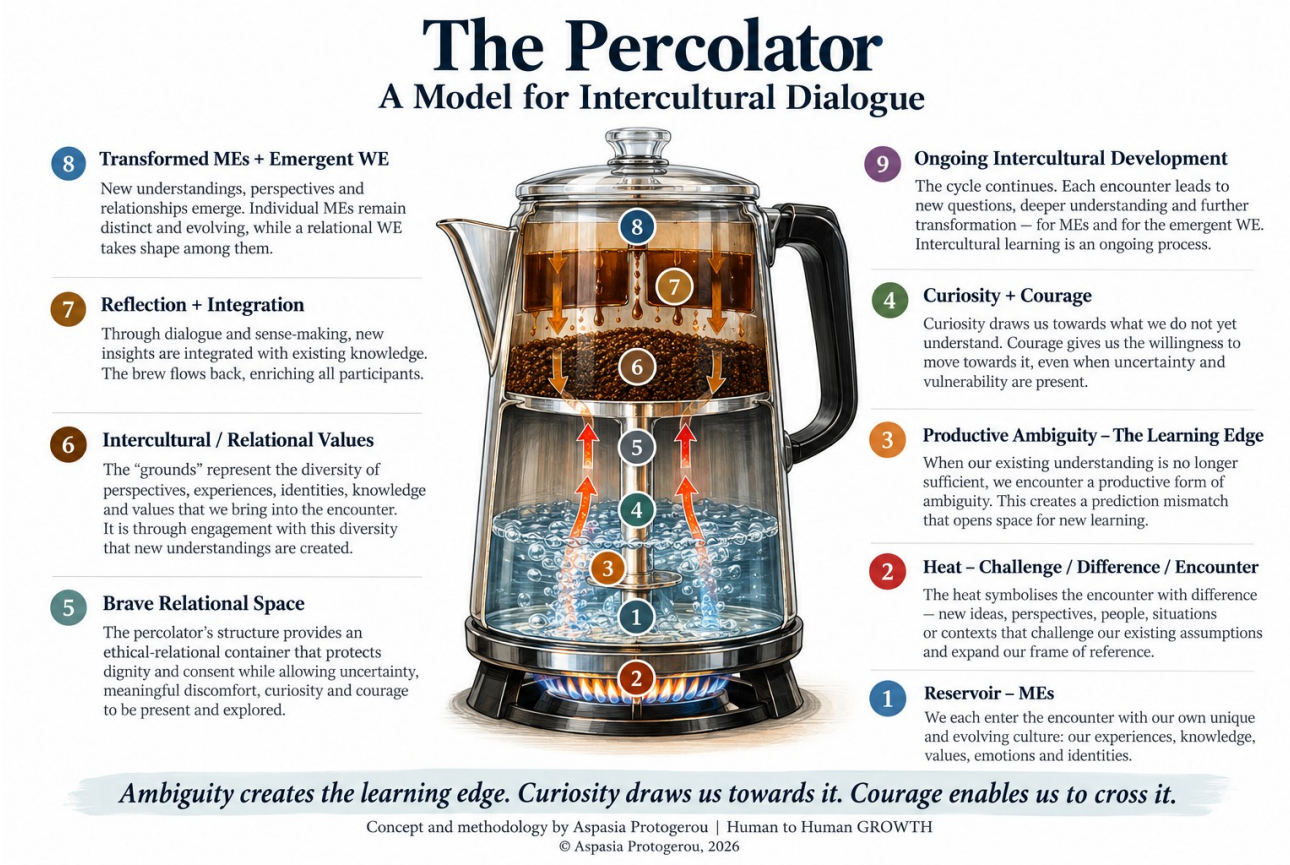


Figure 1. The Percolator - public conceptual map, Version 1.2. Concept and methodology by Aspasia Protogerou. © 2026 Aspasia Protogerou.

Percolator element	Concept	Meaning in the model
Reservoir / water	MEs	Each participant enters with an existing, evolving set of experiences, identities, beliefs, emotions and mental models.
Heat	Challenge / difference / encounter	The encounter introduces novelty, contradiction or another perspective

		and creates energy for movement.
Rising pressure / movement	Productive Ambiguity - the Learning Edge	Existing understanding becomes insufficient while the encounter remains potentially learnable.
Upward movement	Curiosity + courage	Curiosity turns towards the not-yet-understood; courage supports movement without certainty.
Percolator structure	Brave Relational Space	Ethical and relational conditions hold dignity, consent, challenge, ambiguity and participation.
Coffee grounds	Intercultural / relational values	Respect, reciprocity, equality, empathy, listening, openness and other values give the encounter relational quality.
Passage / return	Reflection + integration	Experience is processed, questioned and connected to existing understanding.
Changed brew	Transformed MEs + Emergent WE	Individuals remain distinct while new shared meaning or relational possibility may emerge.
Repeated circulation	Ongoing intercultural development	Each encounter influences the next; intercultural learning remains unfinished.

7. The Emergent WE

The original prototype described a movement from distinct “MEs” towards an “US”. Further development refined this into the Emergent WE to avoid any implication of assimilation or the disappearance of individual difference.

The Emergent WE is not a new identity box. It is a relational possibility: something that can arise when distinct participants create enough shared understanding, trust, responsibility, productive disagreement or capacity for action to be able to say “we” without cancelling the integrity of “I”. It may be temporary or durable, intimate or civic, consensual or marked by continuing disagreement.

The aim of intercultural dialogue, in this model, is not to turn difference into sameness. It is to make room for a relational WE that can hold difference.

8. Pedagogical positioning

The Percolator is situated within non-formal, experiential, participatory and dialogue-based education. It is particularly compatible with educational approaches in which learners enter with prior experience, engage in a shared experience, reflect on what occurred, conceptualise its meaning and consider future action (Anna Lindh Foundation, 2017).

This is important because the metaphor is not intended merely to be explained to participants. In the associated educational application, Brewing Intercultural Dialogue, the metaphor becomes a prompt for collective sense-making. Participants explore what the different elements mean, compare interpretations and examine how their own assumptions operate in encounter.

The complete facilitator sequence, detailed prompts, timing, adaptations, safeguards and trainer notes remain in the protected master dossier and are intentionally not reproduced in this public paper.

9. Development and first pilot

The Percolator emerged from Aspasia Protogerou's practice in intercultural citizenship education and non-formal experiential learning. It was first publicly presented on 20 February 2025 during the online workshop "Intercultural Dialogue over Coffee" for members of the Anna Lindh Foundation network in Luxembourg. A contemporary Fotoessa website record identifies the model as Protogerou's new theoretical model and the session as its first presentation (Fotoessa, 2025).

The first pilot generated six participant evaluation responses. Given the very small sample, these data are treated as formative feedback rather than validation evidence. Participants rated the creation of a space for open self-expression highly, and qualitative feedback described the Percolator as intriguing, positively challenging and engaging. The feedback also suggested that more experienced audiences could benefit from deeper exploration and more time devoted to the model.

The model was subsequently refined in 2026, including a clearer distinction between a Moka-pot prototype visual and the dynamics of true percolation, the development of the Emergent WE, Brave Relational Space, Productive Ambiguity / the Learning Edge, and Courageous Curiosity. The protected Master Methodology Dossier v1.2 FINAL was formally timestamped in Greece on 25 October 2026 (OPI registry no. 9810).

10. Scope, limitations and research agenda

The Percolator should be described as an original conceptual and educational methodology, not as an empirically validated scientific theory. Its neuroscience-informed account of prediction, ambiguity, curiosity and learning draws on convergent findings from adjacent domains; it does not establish that the complete model, its sequence, or a specific neural threshold for intercultural learning has been validated.

Further work should therefore include repeated pilots with documented participant characteristics, structured qualitative and quantitative evaluation, refinement of learning outcomes, and careful study of when ambiguity remains productive and when it becomes confusing, overwhelming or unsafe. The being-to-being horizon also invites future theoretical work on relationality without requiring the current version to make claims about more-than-human applications.

This public paper is intended to establish a citable account of the conceptual model while preserving the creator's detailed facilitation know-how for future training, licensing and controlled dissemination.

11. Original contribution and authorship

The Percolator does not claim authorship of intercultural competence theory, experiential learning, vulnerability theory, ambiguity research, brave-space pedagogy or intercultural citizenship education. These form part of its intellectual and pedagogical context.

The claimed original contribution of Aspasia Protogerou lies in the particular synthesis through which the physical process of percolation becomes a systems model of intercultural encounter; in the framing of Productive Ambiguity as the Learning Edge; in the distinction and relationship among vulnerability, curiosity, courage and engagement and their synthesis as Courageous Curiosity; in the use of Brave Relational Space within this systems architecture; in the framing of each participant as a living and

evolving culture; in the concept of the Emergent WE; and in the development of the associated experiential methodology Brewing Intercultural Dialogue.

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"We do not eliminate ambiguity. We learn how to remain present within it. We do not manufacture a WE. We make room for one to emerge."