CHAPTER 7

Towards a Future-Oriented Psychology
Creating Human Development

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Introduction

Psaltis (Part I in this volume) invites us to rethink the aims of social and developmental psychology to address our contemporary challenges better. We currently face a 'polycrisis' – that is, interacting crises that feedback on themselves, catalysing themselves. This term originated in the 1990s (Kern & Morin, 1993) and has recently gained traction in characterising how several crises are compounding one another (Derbyshire, 2023). Climate change, inequality, infectious diseases, inflation and war are mutually reinforcing crises. This escalation creates uncertainty. What should individuals and societies do? The aim of science, Dewey (1929) argued, is to reduce uncertainty.

One source of certainty in our unfolding polycrisis concerns our role in it. We can take hope and despair, in equal measure, from the fact that human behaviour is implicated in each crisis. While it is tragic that we are grappling with problems of our own making, it should also give us courage because in so far as we have made these problems, we also have the potential to address them. It is not just the polycrisis but specifically our role in either exacerbating or attenuating these crises that necessitates a rethink of social and developmental psychology.

Given our central role in the polycrisis, is it still sufficient for social and developmental psychology to describe people as they are? Questions about how people develop and interact, in a timeless sense, seem quaint. Surely, our current conditions call for more radical questions. How could we develop? What could we become? The question is not whether humans can agree a plan to address our various crises, but rather how we can make it so that humans can address these crises.

The Aims of the Research

While there is some debate about the extent to which the scientific method is independent of social and political concerns (Beland & Cox, 2010),

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there can be no debate about the fact that what we choose to direct the scientific method at is inherently guided by social and political concerns. The problems that we choose to address with science reflect the concerns of our time (Mead, 1936; Rorty, 1998). The scientific method can address an infinite number of questions, but the vast majority have no apparent theoretical or practical interest. For example, measuring the distance from each grain of sand on a beach to every other grain of sand would be a herculean task, dwarfing the resource investment of any scientific study to date. But we choose (quite sensibly) not to pursue it. The questions we choose to pursue tend to benefit someone – and not always the people being studied (e.g. research on advertising, persuasion and manipulation). The point is that there is no neutral scientific question because every scientific study entails a choice not to study something else. The choice of what to study is always social and political.

Social and developmental psychology have amassed mountains of empirical data – hundreds of thousands of studies. But Psaltis (2023) asks: What for? Beyond the cynical answer to this question – that it is 'for' career advancement – Habermas (1968) has identified three broad interests guiding knowledge construction, namely technocratic, hermeneutic and emancipatory interests.

Technocratic interests seek knowledge that predicts, guides interventions and can influence the world and especially other people. For example, political parties use big and small data to make strategic choices on policy issues to increase the chances of being elected. Governments research the impact of remote working, lockdowns and citizen incomes to manage and guide societal changes. Technocratic interests do not require understanding, merely prediction and control. In the social sciences, technocratic interests often entail one group (e.g. companies, governments, health services) creating knowledge to predict the behaviour of another group (e.g. consumers, citizens, patients).

Hermeneutic interests seek knowledge that provides understanding, explanation and tells a good story. This interest leads to knowledge that provides insight into the world, history and the human condition. From a hermeneutic standpoint, technocratic knowledge (e.g. prediction) is unsatisfying because it does not explain the 'why' of human behaviour. Knowledge answering to hermeneutic interests does not need to predict or control anything; it only aims to explain, using narratives and metaphors, to help us make sense of our predicaments.

Emancipatory interests seek knowledge that empowers people to act on the world or themselves. Habermas (1968) argues that this entails reflective

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reason grasping itself as interested and attempting to transcend those interests. Habermas gives the example of psychoanalysis, which provides people with concepts they can use to liberate themselves from their unconscious. Emancipation often begins with understanding the causes of behaviour, but then, through this understanding, humans can manipulate these causes to produce different outcomes. Thus, ironically, understanding these so-called causes of human behaviour can liberate humans from these causes, turning them into choices (e.g. choices about genetic modification, socialisation and education).

Psaltis's (2023) proposal for genetic social and developmental psychology is emancipatory. He aims to offer a theory of social change as a road map that will enable humans to think critically and subsequently guide themselves into the future. Specifically, he seeks to build on the work of Piaget (1977) and Duveen (2008) to construct a theory that captures the dynamics of social change that foregrounds heterogeneity, identity and asymmetries. This aim is laudable and deserves our support. But does it go far enough to address our current polycrisis?

Using a road map entails a desired destination. Most maps can lead to many destinations. How should one choose? And how do tourists decide to travel to a destination that they have never been to before? They choose based on pre-imagined potential destinations. Before arrival, there is an expectation. Indeed, much of popular culture (films, novels, internet stories) scaffold our imagination of distant destinations, enabling us to imagine a wide range of destinations. These imaginations empower tourists to choose their destinations (Gillespie, 2007). Similarly, we can conceptualise human development as a journey. From this standpoint, we need to begin with an understanding of the possible destinations of human development. Thus, it is not enough to have a theory of social change based on what is (as if our knowledge is a mirror of nature; Rorty, 1981). Instead, we must refocus on what could be (Gergen, 2015; Rorty, 1999). We need to create possibilities through which people become emancipated to make choices about their development. That is to say, in addition to creating road maps, social and developmental researchers also need to help people imagine the possible destinations of human and societal development. And more narrowly, researchers need to become more explicit about their role in the social change process. Even ignoring researchers' role in social change is a choice.

To rethink the future of social and developmental psychology, I argue two assumptions need to be adopted. First, human social and societal development is open-ended. Second, research should aim not merely to describe what is but also to imagine what could be.

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Open-ended Development

Despite many profound insights, neither Piaget nor Vygotsky fully appreciated the diversity of possible outcomes for human or societal development. Their work was foundational for understanding how social relations drive human and societal development through scaffolding (Berk & Winsler, 1995; Gillespie & Hald, 2017; Vygotsky, 1978) and relations of cooperation and constraint (Psaltis & Duveen, 2006, 2007). Their ideas form the basis for a sociocultural understanding of how humans shape their own material and social environments, which in turn feed back and shape human and societal development. But they both assumed that individuals (and, to a lesser extent, societies) were teleologically developing towards an endpoint. However, since their pioneering work, the assumption of linear development has been increasingly challenged. The metaphor of human development as linear should be replaced with less normative and prescriptive metaphors (Zittoun & Gillespie, 2020). Research on people with autism that attempts to give up on neurotypical assumptions and study autistic people on their own terms has found increasingly subtle forms of sociality (Heasman & Gillespie, 2017, 2019). Research on animals continues to surprise not only in terms of how advanced they are relative to humans but especially in terms of how advanced they are on their own terms (Wynne & Udell, 2020). And research on plants increasingly reveals communication and coordination capabilities that are simply incomparable to any human ability (Bonfante & Anca, 2009). The metaphor of the 'tree of life' adequately captures the innumerably diverse development endpoints, both between and within species. We need to become more attuned to the diversity of potential developments both between and within species. This sensitivity logically entails a new research question. The question is not how individuals or societies develop. The question becomes: What type of individuals or societies do we want?

There is a paradigmatic difference between dialectical and dialogical development (Wegerif, 2008). Piaget and Vygotsky, influenced by Marx and Hegel, had teleological or dialectical models of development. They assumed that development was towards a singular and known point. In contrast, consider Bakhtin's (1981, 1986) ideas about dialogical development. Novels, like dialogues, Bakhtin argued, can have multiple endings: they do not teleologically progress toward a predefined endpoint. Instead, they are fundamentally open-ended. Participants in a dialogue make history; the sequence of words in context and the emerging nuances will be unique (assuming it is more than a formulaic interaction). There

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are so many degrees of freedom in a dialogue, with multiple parties contributing, that the development is fundamentally creative and emergent. Similarly, novels have an infinity of possible endings because of the infinite degrees of freedom being laid down, word by word, by the author. The key point is that although the outcome of dialogues, novels and, by extension, human life is unpredictable and creative, it does not mean we should give up studying development. It means we should examine the agency and responsibility of all participants to make their future. It means we should investigate the extent to which the participants can critically reflect on the future that they are making, and whether they are aware of alternative futures.

Like Psaltis (2023), I believe that social and developmental psychology needs a strong future orientation. Some may see this as optimistic, but it is also the basis for pessimism. Without humans on the planet, I would be much more optimistic about the future of all terrestrial plants and species. Humans have growing agency; we are increasingly responsible for the fate of ourselves, other species, and even the earth's ecology. In each case, our individual and collective behaviour could lead to diverse outcomes.

However, human agency cannot be taken for granted. As Psaltis (2023) argues, agency can be cultivated or curtailed. Certain institutions, patterns of education and societal norms can conceal the choices that people could make individually and collectively. The mere awareness of alternative possibilities has been enough to change individuals' life trajectories and alter the course of entire societies (Power, 2020; Wagoner et al., 2018; Zittoun & Gillespie, 2018). This is why alternatives are so destabilising (Gillespie, 2008). Revolutions, for example, begin not with what is, but with ideas about what could be (Zittoun & Gillespie, 2015).

Research that aims only to describe the world as it is, rather than what it could be, is complicit in naturalising our current polycrisis. By naturalising I'm referring to the tendency to see human-made crises as a product of nature rather than a product of human activity (Berger & Luckmann, 1967). To study what is, to only make predictions about what will be, as if the present inevitably leads to the future, is to conceal humans' role in constructing the future. Such research is, arguably, dangerous because it obscures our responsibility for the crises we face and the future we will create. Thus, from the idea of open-ended development, we must recover a sense of personal and collective responsibility for our individual and societal trajectories. We must acknowledge that whatever happens, the outcome could have been different depending on our actions.

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Creating Possibilities

Choosing the goals of human and societal development is not a scientific question. Social scientists should not seek to solve our contemporary crises. Instead, researchers can play a critical role in helping people to imagine possible futures and provide rigorous speculation about possible pathways. It is not for researchers to tell people which possible future to strive for. Instead, they should help people to envision their individual and collective possible futures. This has already happened in climate change simulations that show the impact of various policies and the models that were used during the COVID-19 pandemic to project mortality rates under various interventions. I propose to extrapolate this basic idea into the core business of social science in general and social and developmental psychology in particular.

Assuming that social and developmental psychology has an emancipatory aim, the question becomes: How should we best achieve that aim? Given the infinity of possible research questions, which research questions should we pursue? What research projects are most likely to emancipate and empower people? Research already examines the factors that lead to our current state of human and societal development. What is lacking is more abductive and creative research on alternative trajectories of human and societal development. What pathways of ontological development are possible? What are the possible near, medium and far goals for human societal development? And, for any developmental trajectory, what are the most useful resources to empower people and societies on their journey (Gillespie & Zittoun, 2010)?

As a case study in development, Psaltis's (2023) account of moving from a nationalist to a reflective and sceptical position is instructive. It reveals the many sociocultural layers that hold the Cypriot conflict in place: politics and education are obvious barriers, but also grandparents, family history, classroom practices and students' dreams for the future (e.g. in education or the military). Psaltis's account, beyond showing the forces of stasis, also provides insight into how social change, at least at the level of an individual, can occur and how a perspective-transcending viewpoint can emerge. How does this happen? In Psaltis's case, leaving Cyprus (first for military training in Greece, and then for higher-level studies in the United Kingdom) seems particularly important. This physical distance from Cyprus arguably enabled psychological distancing (Gillespie & Martin, 2014) and self-reflection (Gillespie, 2018). It also put Psaltis in contact with other people who think differently, who saw the conflict from the

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outside, and who provided new discourses about conflict, nationalism and the infrastructure that is needed to imagine a community and prolong a conflict. These encounters with people and ideas enabled Psaltis to see the Cyrus issue in a new light; to see possibilities for the future that had been obscured. But such cognitive distanciation and self-reflection is insufficient. Creating the future requires conviction and a sense of responsibility to act upon such insights, to cease being determined by history, and instead to try and create history – as Psaltis did with his colleagues when they established the Home for Co-operation.

When analysing a conflict situation such as Cyprus, current social psychological theory turns to the contact hypothesis (Allport, 1954). Hundreds of studies have refined the conditions for positive contact, including institutional support, the prototypicality of interactants, successful outcomes, clear role division and interacting on the basis of group rather than individual identities (Paluck et al., 2019; Zhou et al., 2019). Studies have examined the frequency of contact, whether the contact is voluntary, whether the observed behaviour confirms or disconfirms expectations, whether the contact is superficial or intimate, face-to-face or mediated and so on. And yet, despite so many studies, with so many variables, our capacity to overcome group conflict remains minimal. The problem is that the so-called theory is, more accurately, a 'laundry list' of variables (Gillespie, 2015; Pettigrew, 1998). Each time the theory fails, another condition is added to the list. But maybe no one set of conditions will inevitably yield conflict reduction. Perhaps it is necessary to go beyond generic factors to consider specific factors. Perhaps it is necessary to go beyond the push from the past to consider the potential full for the future. Thus, the focus should be less on what caused the conflict and more on what can be done to construct a future that sufficiently addresses peoples' specific concerns. The aim is not for a perfect 'solution' or 'resolution' but rather to create in incremental improvement upon the present (Lederach, 2005).

Psaltis (2023) correctly focuses on the 'prospect' of the group: that is, what the representational project of the group is (Bauer & Gaskell, 1999). I suggest building on this insight. The aim of contact should not be to resolve the past but to transform the future (Mitchell, 2002). The communities should be helped to envision various scenarios out of the multitude of possible futures, for example, a continuation of the status quo, conflict escalation or living together. An alternative future becomes possible once the participants have agreed upon it and believe they have the power to institute it. As Psaltis points out, such progress will likely require substantial material changes to education, media and communication.

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These challenges are real and should not be underestimated. My point is that such changes are impossible unless communities desire a new future and believe they have the agency to make it a reality. Thus, the aim is not to resolve or rewrite the irreversible events of the past, but rather to create tomorrow's history by seizing today (Lederach, 2015).

Making a new future is challenging. There are many barriers and forces of stasis that must be overcome. To overcome these obstacles, research can be helpful. Psaltis (2023) shows how education in Cyprus prevents the creation of a future in which both Turkish and Greek Cypriots live together. Instead, education emphasises the events of 1974 and implies that a return to the past is the only fair and natural outcome. The problem is that such narratives can be 'semantic barriers' (Gillespie, 2020; Psaltis, 2012) that block engagement with alternative futures. A return to the past is not realistic for either side. The current starting point is not in the past but in the present. The question becomes: What changes might improve what is rather than what was? But engaging in such future-making requires openness. And researchers can promote such openness by critically examining the ideas that block the exploration of possible futures (Zittoun & Gillespie, 2015).

Conclusion

It can seem naïve to write about creating possibilities in a time of crisis (Glăveanu, 2022). But we must keep in mind that we have created, or at least contributed to, our current crises. Creating possibilities is not just about the upside. Humans have shown, time and again, that we are tragically able to create downside possibilities. The crises we face are, in large part, human creations. Yet, despite causing them, we have not fully taken responsibility for them. The point is that we need to appreciate that our future will be, in part, our collective creation. With the increasing power of technologies (both material and social), we are increasingly shaping our future. Only by acknowledging this can we become sufficiently empowered to choose our future. Conversely, not acknowledging this, and continuing to study human development as we find it, risks perpetuating our current crises. Given our polycrisis, the real naïvete is naturalising the future, assuming that it happens to us independently of human choices.

REFERENCES

Allport, G. (1954). *The nature of prejudice*. Boston, MA: Addison-Wesley.

Bakhtin, M. (1981). *The dialogic imagination: Four essays*. Austin: University of Texas Press.

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 18 Nov 2026 at 02:33:38, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009393133.011

(1986). *Speech genres & other late essays*. Austin: University of Texas Press.
Bauer, M. W., & Gaskell, G. (1999). Towards a paradigm for research on social representations. *Journal for the Theory of Social Behaviour*, *29*(2), 163–186.
Beland, D., & Cox, R. H. (2010). *Ideas and politics in social science research*. Oxford: Oxford University Press.
Berger, P. L., & Luckmann, T. (1967). *The social construction of reality*. New York: Doubleday.
Berk, L. E., & Winsler, A. (1995). *Scaffolding children's learning: Vygotsky and early childhood education*. Washington, DC: National Association for the Young Children.
Bonfante, P., & Anca, I.-A. (2009). Plants, mycorrhizal fungi, and bacteria: A network of interactions. *Annual Review of Microbiology*, *63*(1), 363–383. https://doi.org/10.1146/annurev.micro.091208.073504.
Derbyshire, J. (2023, January 1). *Year in a word: Polycrisis*. Financial Times. Available at www.ft.com/content/f6c4f63c-aa71-46f0-a0a7-c2a4c4a3c0f1.
Dewey, J. (1929). *The quest for certainty*. New York: Minton, Balch & Company.
Duveen, G. (2008). Social actors and social groups: A return to heterogeneity in social psychology. *Journal for the Theory of Social Behaviour*, *38*(4), 369–374. https://doi.org/10.1111/j.1468-5914.2008.00385.x.
Gergen, K. J. (2015). From mirroring to world-making: Research as future forming. *Journal for the Theory of Social Behaviour*, *45*(3), 287–310. https://doi.org/10.1111/jtsb.12075.
Gillespie, A. (2007). Time, self and the other: The striving tourist in Ladakh, north India. In L. Simao & J. Valsiner (Eds.), *Otherness in question: Development of the self* (pp. 163–186). Charlotte, NC: Information Age Publishing.
(2008). Social representations, alternative representations and semantic barriers. *Journal for the Theory of Social Behaviour*, *38*(4), 375–391. https://doi.org/10.1111/j.1468-5914.2008.00376.x.
(2015). Non-transformative social interaction. In C. Psaltis, A. Gillespie, & A. N. Perret-Clermont (Eds.), *Social relations in human and societal development* (pp. 97–113). London: Palgrave Macmillan.
(2018). Distinguishing two processes of self-reflection. In J. Valsiner & A. Rosa (Eds.), *The Cambridge handbook of sociocultural psychology* (pp. 245–259). Cambridge: Cambridge University Press.
(2020). Semantic contact and semantic barriers: Reactionary responses to disruptive ideas. *Current Opinion in Psychology*, *35*, 21–25. https://doi.org/10.1016/j.copsyc.2020.02.010.
Gillespie, A., & Hald, J. (2017). The paradox of helping: Contradictory effects of scaffolding people with aphasia to communicate. *PLoS ONE*, *12*(8), e0180708. https://doi.org/10.1371/journal.pone.0180708.
Gillespie, A., & Martin, J. (2014). Position Exchange Theory: A socio-material basis for discursive and psychological positioning. *New Ideas in Psychology*, *32*, 73–79.
Gillespie, A., & Zittoun, T. (2010). Using resources: Conceptualizing the mediation and reflective use of tools and signs. *Culture & Psychology*, *16*(1), 37–62. https://doi.org/10.1177/1354067X09344888.

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Glăveanu, V. P. (2022). Possibility studies: A manifesto. *Possibility Studies & Society*, 27538699221127580. https://doi.org/10.1177/27538699221127580.
Habermas, J. (1968). *Knowledge and human interests*. Cambridge: Polity Press.
Heasman, B., & Gillespie, A. (2017). Perspective-taking is two-sided: Misunderstandings between people with Asperger's syndrome and their family members. *Autism*, *22*(6), 740–750. https://doi.org/10.1177/1362361317708287.
(2019). Neurodivergent intersubjectivity: Distinctive features of how autistic people create shared understanding. *Autism*, *23*(4), 910–921. https://doi.org/10.1177/1362361318785172.
Kern, A.-B., & Morin, E. (1993). *Terre-patrie*. Paris: Média Diffusion.
Lederach, J. (2005). *The moral imagination: The art and soul of building peace*. Oxford: Oxford University Press.
(2015). *Little book of conflict transformation: Clear articulation of the guiding principles by a pioneer in the field*. New York: Simon and Schuster.
Mead, G. H. (1936). *Movements of thought in the nineteenth century* (M. H. Moore, Ed.). Chicago: University of Chicago Press.
Mitchell, C. (2002). Beyond resolution: What does conflict transformation actually transform? *Peace and Conflict Studies*, *9*(1), 1–23. https://doi.org/10.46743/1082-7307/2002.1020.
Paluck, E. L., Green, S. A., & Green, D. P. (2019). The contact hypothesis re-evaluated. *Behavioural Public Policy*, *3*(2), 129–158. https://doi.org/10.1017/bpp.2018.25.
Pettigrew, T. F. (1998). Intergroup contact theory. *Annual Review of Psychology*, *49*(1), 65–85. https://doi.org/10.1146/annurev.psych.49.1.65.
Piaget, J. (1977). *Sociological studies* (L. Smith, Ed.). London: Psychology Press.
Power, S. A. (2020). Editorial overview: The psychology of rallies, riots, and revolutions. *Current Opinion in Psychology*, *35*, v–x. https://doi.org/10.1016/j.copsyc.2020.08.018.
Psaltis, C. (2012). Culture and social representations: A continuing dialogue in search for heterogeneity in social developmental psychology. *Culture & Psychology*, *18*(3), 375–390. https://doi.org/10.1177/1354067X12446233.
Psaltis, C., & Duveen, G. (2006). Social relations and cognitive development: The influence of conversation type and representations of gender. *European Journal of Social Psychology*, *36*(3), 407–430.
(2007). Conservation and conversation types: Forms of recognition and cognitive development. *British Journal of Developmental Psychology*, *25*(1), 79–102.
Rorty, R. (1981). *Philosophy and the mirror of nature*. Princeton, NJ: Princeton University Press.
(1998). *Truth and progress: Philosophical papers*. Cambridge: Cambridge University Press.
(1999). *Philosophy and social hope*. New York: Penguin.
Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
Wagoner, B., Moghaddam, F. M., & Valsiner, J. (2018). *The psychology of radical social change: From rage to revolution*. Cambridge: Cambridge University Press.

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Wegerif, R. (2008). Dialogic or dialectic? The significance of ontological assumptions in research on educational dialogue. *British Educational Research Journal*, *34*(3), 347–361. https://doi.org/10.1080/01411920701532228.

Wynne, C. D. L., & Udell, M. A. R. (2020). *Animal cognition: Evolution, behavior and cognition*. London: Bloomsbury Publishing.

Zhou, S., Page-Gould, E., Aron, A., Moyer, A., & Hewstone, M. (2019). The extended contact hypothesis: A meta-analysis on 20 years of research. *Personality and Social Psychology Review*, *23*(2), 132–160. https://doi.org/10.1177/1088868318762647.

Zittoun, T., & Gillespie, A. (2015). *Imagination in human and cultural development*. London: Routledge.

(2018). Imagining the collective future: A sociocultural perspective. In C. de Saint-Laurent, S. Obradovic, & K. R. Carriere (Eds.), *Imagining Collective Futures* (pp. 15–37). London: Palgrave. https://doi.org/10.1007/978-3-319-76051-3_2.

(2020). Metaphors of development and the development of metaphors. *Theory & Psychology*, *30*(6), 827–841. https://doi.org/10.1177/0959354320939194.

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